Poster Abstracts

**Pushing Palliative Care Upstream: Integration into a Community-Based Oncology Practice (S701)**
Jennifer Blechman, MD, Partners in Care, Bend, OR.

**Objectives**
- Show one method of integrating palliative care into an oncology practice.
- Demonstrate metrics tracked and methods used.

**Original Research Background.** It is now well established that palliative care is an integral part of cancer treatment, recommended by the National Cancer Comprehensive Network for evidence-based practices. Partners in Care is a non-profit, community-based hospice/home health agency in Bend OR, and consistent with national trends, it receives late oncology referrals to hospice. Partnership with a multispecialty group was established to allow for a palliative care specialist to be embedded into their oncology clinic.

**Research Objectives.** The hypothesis is that palliative care involvement will result in more referrals to hospice with longer length of stays, improved symptom burden, and enhanced completion of advance care plans (ACPs).

**Methods.** Palliative care consults are offered 2 days per week in the oncology clinic. Triggers have been created to facilitate consultation. Quality metrics have been carefully tracked and include symptom scores, advance care planning, and transition and length of stay for hospice referrals. Financial support has been provided through grant funding from local insurance and community foundations.

**Results.** Over 10 months, 116 new oncology patients were seen, and they had an average 1.9 visits. Documented ACP discussions occurred in 85% patients. Of patients with moderate to severe pain and dyspnea, scores improved by 65% and 50% respectively. Length of stay in hospice increased from 26 to 36 days. All of the patient respondents surveyed would recommend our service to others. Provider respondents 100% strongly agree that objectives were met when they requested a palliative care consult.

**Conclusion.** Palliative care has been successfully integrated into a community-based oncology practice, resulting in increased access to palliative care, increased utilization of and length of stay in hospice, improved symptom management, increased use of ACP, and enhanced patient/family satisfaction.

**Implications for Research, Policy or Practice.** Future directions include using Quality Data Collection Tool (QDACT) to better track quality measures, inclusion of a social worker, and alignment with insurers and ACOs for cost support and data analytics.

**We’re the Eyes and the Ears, but We Don’t Have a Voice: Perspectives of Hospice Aides (S702)**
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**Objectives**
- Articulate at least two issues that affect perceptions of marginalization among hospice aides.
- Describe at least two implications of hospice aides’ marginalization within the hospice team.

**Original Research Background.** Interdisciplinary teams have been shown to improve symptom management and reduce hospitalizations in home healthcare. The Institute of Medicine identifies communication and collaboration within the hospice interdisciplinary team (IDT) as a priority, yet despite spending the majority of time with patients and caregivers, hospice aides’ perceptions of team-based patient care is unknown.

**Research Objectives.** This study seeks to examine how hospice aides perceive their roles in the IDT and their contributions to patient-centered, end-of-life care.

**Methods.** This qualitative descriptive study utilized focus group interviewing triangulated with field observation methods. A convenience sample of 13 nursing aides participated in two focus groups, and two aides were shadowed for 16 hours. Field notes and transcripts were content-analyzed, and themes describing the perspectives of aides were identified.

**Results.** Three themes were identified in the data: 1) “We’re the eyes and the ears,” 2) “We know the patient down to a tee,” and 3) “But we have no voice.” Aides perceived being front-line care providers and first responders to emergent problems. In the process, they also formed close personal relationships with patients and caregivers. However, aides perceived their contributions to care and relationships with the family as under-recognized by the IDT, and described overt and systematic marginalization of their roles and skills.
Structural inequality was also verified on clinical observations.

**Conclusion.** This disconnect between direct contact with patients and families and perceived marginalization by the IDT created resentment among some aides and an attitude of resignation among others.

**Implications for Research, Policy or Practice.** Despite their perceptions of their contributions to hospice care, aides felt undervalued by their fellow team members. Hospice aides are essential members of the IDT, and they represent a vulnerable workforce. Better integration of hospice aides may improve team collaborations in patient care, impact the retention of a skilled and essential workforce, and impact patient and caregiver support and outcomes.

**The Role of Nurse Gaze in Patient-Nurse Interaction During Routine Intensive Care Unit Care (S703)**

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**Objectives**
- Describe a typology of nurse gaze in routine ICU care.
- Analyze inter-rater reliability (IRR) for the different nurse gaze.

**Original Research Background.** Non-vocal communication is a vital aspect of human interaction for establishing meaning, trust, and credibility between communicators. Eye gaze is essential in face-to-face interactions regulating turn taking, attention seeking, and conversation organization. Provider gaze signals engagement or disengagement of patient participation in health interactions. However, there is little empirical data on the role of gaze in interactions with patients in the ICU who are at high risk of dying.

**Research Objectives.** The purpose of this study is to describe the role of gaze in communication with non-vocal, critically ill patients in the intensive care unit (ICU).

**Methods.** Patients were adults >21 y.o., awake, arousable, able to communicate by head nods or mouthing words, and non-vocal due to endotracheal intubation or tracheostomy. Nurses were 10 volunteers from a medical ICU and a cardio-thoracic surgical ICU participating in the usual care cohort of the Study of Patient-Nurse Effectiveness with Assisted Communication Strategies (SPEACS) study. Research method is a secondary analysis using qualitative description and constant comparison of video-recorded interactions between 10 nurse-patient dyads. Inter-rater reliability (IRR) was assessed with a second trained coder.

**Results.** A typology consisting of four nurse gazes was identified: Listening, Assessing, Technical Doing, and Relating. Technical Doing (54%) and Listening (18%) gazes were the most frequently occurring in the sample. Rater agreement ranged from 71-100% per video session with an overall agreement of 87%. We calculated agreement between raters for each gaze category for 13 videos: Technical Doing 71%, Listening 63%, Assessing 58%, and Relating 90%.

**Conclusion.** Technical Doing and Assessing gaze focus on the nurse. Listening and Relating gaze are mutual, collaborative gaze with patients. Relating gaze, less frequently observed, may signal patient-nurse relationship development.

**Implications for Research, Policy or Practice.** A typology of nurse gaze in routine ICU care begins to explicate the subtle intricacies of nurse-patient interaction in patients at high risk for dying.

**Reduced Length of Hospital Stay of an Emergency Department Is Associated with an Early Palliative Care Team Interconsultation Strategy (S704)**

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**Objectives**
- Demonstrate that early palliative care decreased time of hospital stay.
- Create an easy tool to measure of the perception of palliative care at an emergency department, the Awareness Index.

**Original Research Background.** Previous studies report that early palliative care (EPC) is associated with clinical benefits, but there is limited evidence about the impact on patients in an emergency. We recently introduced an EPC strategy in a tertiary reference emergency department (ED).

**Research Objectives.** The aim of this study was to evaluate the impact of timing of palliative care interconsultation on boarding time of patients.

**Methods.** Clinical cohort of 281 adult patients admitted to ED due to aggravation of chronic conditions in need of palliative care. The attending physician determined the need of palliative care interconsultation. The time between arrival in ED and the consultation by the palliative care team was defined as Awareness Index (AI), and the time between the first consultation and hospital discharge was defined as Resolution Index (RI). The inpatient time (IT) was the sum of SI with RI.
Results. 121 women/160 men, mean age 64.14±16.3. The aggravated chronic conditions were neurological diseases (116, 41%), advanced cancer (72; 25%), dementia (23, 8%), multiple comorbidities (18, 6%), serious chronic liver disease (7, 2%), chronic obstructive pulmonary disease (10; 3%), and others (35, 12%). We noted an increase of the number of patients evaluated since the beginning of the project (13 until 45/month). Lower IT was strongly associated with lower SI (p<0.01).

Conclusion. Palliative care interconsultation strategy during emergency department admission is associated with lower length of ED stay for patients admitted with acute aggravated, chronic conditions.

Implications for Research, Policy or Practice. These findings showed the need to train emergency physicians on palliative care since awareness of the importance of an early palliative care team intervention in ER was associated with shorter length of stay.

Sustaining Large-Scale, Direct-Observation Research in the Natural Setting: The Palliative Care Communication Research Initiative Cohort Study (S705)


Objectives
- Acquire increased awareness of direct-observation research.
- Identify one approach for sustaining research-clinical team collaboration in direct-observation research.

Original Research Background. Understanding the characteristics of communication that foster patient-centered outcomes amid serious illness is essential for the science of palliative care. However, epidemiological cohort studies that directly observe clinical conversations can be challenging to conduct in the natural hospital setting.

Research Objectives. We describe the successful enrollment, observation and data collection methods of the ongoing Palliative Care Communication Research Initiative (PCCRI).

Methods. The PCCRI is a multi-site (Rochester, NY and San Francisco, CA) cohort study of naturally occurring inpatient palliative care consultations. The 6-month cohort data includes directly observed and audio-recorded palliative care consultations (up to the first three visits); patient/proxy/clinician self-report questionnaires both before and the day after consultation; post-consultation, in-depth interviews; and medical/administrative records.

Results. One hundred seventy patients (10% by proxy) and 45 palliative care clinicians enrolled in PCCRI during the first 18 months of enrollment. Seventy percent of eligible patients (adults with advanced solid cancer, English speaking, and not enrolled in hospice at time of referral) were invited to participate, and 60% of them ultimately enrolled, resulting in an overall 42% sampling proportion. The PCCRI successfully oversamples for minority/under-represented patient populations.

Conclusion. Epidemiologic study of patient-family-clinician communication in palliative care settings is feasible and acceptable to patients, proxies and clinicians. We detail the successful PCCRI methods for enrollment, direct observation, and data collection for this complex “field” environment.

Implications for Research, Policy or Practice. Results from this work will provide the empirical basis for understanding, measuring and disseminating high-quality communication in palliative care settings.

Dr. Gramling is representing the full PCCRI Writing Group on this abstract solely due to limitations in space for multiple-authorship. This work is funded by a Research Scholar Grant from the American Cancer Society (PI: R. Gramling)

Comparing the Pharmacokinetics of Rectally Administered Phenobarbital Tablets in Microenema Form Versus Suppository (S706)

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Objectives
- Describe this research study including the objectives, methods, results and conclusions.
- Describe the implications of this study within the context of clinical practice and need for future research.

Original Research Background. The oral route is compromised for nearly all patients approaching death. When agitation or other intractable symptoms occur, an effective, reliable and comfortable alternate route for medication delivery that is easy to administer in the home setting is highly desirable.
Research Objectives. To characterize the early absorption profile, variability, and comfort of phenobarbital tablets given in a microenema suspension delivered via the Macy Catheter® (MC) versus the same dose given via suppository.

Methods. This was a randomized, open-label, crossover study comparing the early absorption profile of equal doses of phenobarbital administered rectally in three treatment phases: phenobarbital suppository and two different microenemas with phenobarbital tablets crushed and suspended in 6ml (MC-6) and 20ml (MC-20) of tap water.

Results. Mean plasma phenobarbital concentrations at 10 min were 12x higher for MC-20 and 8x higher for MC-6 compared to suppository. Concentrations achieved in 30 minutes via MC-20 took almost 3 hours to achieve with suppository. Mean AUC values were higher for MC-20 and MC-6 (82% and 46%, respectively) vs. suppository ($P < 0.05$). There was less variability in absorption for MC-20 and MC-6 (1.4 to 1.9-fold difference) compared to a 4.4-fold difference via suppository. MC administrations were reported as “not uncomfortable” compared to suppositories, which were reported as “mildly uncomfortable” ($P < 0.05$).

Conclusion. The absorption kinetics of Macy Catheter-administered phenobarbital microenemas were superior to compounded phenobarbital suppositories, including rate of early absorption, overall absorption, variability, and comfort of administration.

Implications for Research, Policy or Practice. The administration of micro-enemas with a rectal access device such as the Macy Catheter could play an important role in the rapid control of symptoms related to agitation, seizures, and intractable suffering in the home setting, allowing more patients to die peacefully in the environment of their choice. Further research would be beneficial to better understand the potential role of microenema-delivered medications in symptom control.

Quality-of-Life (QoL) in Patients with Advanced Solid Tumors as a Screening Tool During Phase I Clinical Trial Recruitment—Prospective Pilot Study on Implications on Eligibility (S707)

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Objectives
- Recognize QoL as a predictor for serious adverse effect (SAE) occurrence in patients enrolled in phase I oncology clinical trials.
- Recognize the importance of interdisciplinary approach when dealing with the oncology patient.

Original Research Background. Despite physicians attempts to select the “fittest” of subjects for phase I oncology trials using rigorous inclusion/exclusion criteria, many patients still suffer from serious adverse events (SAEs) that lead to increased morbidity and mortality.

Research Objectives. To assess whether baseline quality-of-life (QoL) scores can predict increased likelihood of SAEs in patients and hence aid investigator judgment in deciding patient fitness for phase I studies.

Methods. 92 patients with solid tumors were included in this analysis after enrolling in one of 23 phase I solid tumor clinical trials at a comprehensive cancer center in Buffalo, NY. QoL questionnaires (FACT-G, EORTC QLQ-C30 and Medical Outcomes Study Social Support Survey) were administered at baseline. All SAEs that occurred within the first four cycles of treatment were recorded. Fisher’s exact test was used to study the association between categorical variables. A linear transformation was used to standardize QoL scores. $P$-value $\leq 0.05$ was considered statistically significant.

Results. Mean age of the patients was 61 years, and 41% were male. Baseline EORTC QLQ-C30 scores were poorer among patients who encountered SAEs ($p = 0.01$). When EORTC QLQ-C30 scores were further analyzed according to specific domains, worse global health status, functional, and symptom scores were each associated with occurrence of SAEs ($p = 0.05, 0.03$ and $0.02$, respectively).

Conclusion. Baseline EORTC QLQ-C30 score is associated with risk of SAEs during phase I trial therapy in patients with advanced solid malignancies. Additional studies are needed to validate this observation and assess efficacy of interventions, such as early palliative care, that might mitigate the risk for SAE in this population.

Implications for Research, Policy or Practice. Patients with otherwise favorable "traditional" inclusion criteria may still be at an increased risk for SAEs due to their baseline QoL, a previously unrecognized predictor of adverse events in these trials. This study supports change in current phase I eligibility protocols used for enrollment.

Ethnic Differences in Advance Directive Completion and Care Preferences Over Time (S708)

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Objectives
- Identify differences in advance directive completion rates among ethnic minority groups.
• Identify differences in care preferences among ethnic minority groups.

**Original Research Background.** Studies have documented lower advance directive (AD) completion among minority groups. Among those with ADs, blacks are more likely than whites to prefer aggressive care. Little is known about how and if these differences in preferences have changed over time.

**Research Objectives.** This nationally representative study aimed to investigate if differences in AD development persisted after adjusting for SES, health conditions, and religious involvement. Year of death was analyzed to see how AD completion changed over time. For those with an AD, we investigated the association between these factors and electing aggressive care.

**Methods.** We used data from the 2000-2012 Health and Retirement Study (HRS) exit interviews, with family members of 8552 decedents included in the analysis. Analyses included step-wise logistic regression to determine the relationship between ethnicity and AD completion and preferences for aggressive care and how it changed over time.

**Results.** Overall, 42.8% (n=3658) decedents had completed an AD. Whites had the highest prevalence of AD completion at 51%, Hispanics and blacks at 16%. Additionally, 24.4% of blacks completing an AD elected prolonged care compared to 14.4% of Hispanics and 3.6% of whites. Blacks and Hispanics each had 73% lower odds of completing an AD. Other factors associated with completing an AD included increased age, more than high school education, being widowed, higher SES, cancer, and attending religious services. For blacks, AD completion increased over time.

**Conclusion.** Blacks and Hispanics had significantly lower rates of AD completion than whites. Blacks who completed ADs were more likely to opt for aggressive care. Model covariates had a relatively small influence on ethnic differences. The odds of having an AD among blacks increased for each subsequent death year.

**Implications for Research, Policy or Practice.** The effect of cultural differences in AD completion rates among minorities requires further investigation. Clinicians should be aware of differences in treatment preferences and ensure they are honored.

**Access to Hospice for Undocumented Immigrants (S709)**

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**Objectives**

- Identify access challenges faced by undocumented immigrants seeking hospice services.
- Cite the availability of hospice enrollment for undocumented immigrants in a national sample.
- Identify characteristics of hospice agencies that are associated with enrollment of undocumented immigrants.

**Original Research Background.** The 11 million undocumented immigrants in the U.S. are not covered by the Medicare hospice benefit, and the majority are uninsured. Little is known about access to hospice for this population.

**Research Objectives.** To determine the availability of hospice care to undocumented immigrants.

**Methods.** Data for this study are from an ongoing national study of hospices to determine best practices in outreach to minorities. Via a web-based survey, we collected data assessing hospices’ practices regarding enrollment of undocumented immigrants. We used frequencies to summarize responses to individual items and Chi-square to compare responses by hospice characteristics.

**Results.** Data were available for 161 hospices from four U.S. census regions: South (N=82, 50.9%), Midwest (N=42, 26.1%), Northeast (N=26, 16.2%), and West (N=11, 6.8%). A majority (N=92, 57.1%) reported offering unrestricted access to hospice for the undocumented. Many agencies (N=35, 21.7%) offered access but placed restrictions on the number of patients, and 12 (7.5%) reported that enrollment was not available to undocumented patients; 22 (13.7%) did not know if enrollment was available. Of the 97 hospices that reported their enrollment practices, 48.4% (N=47) had received a total of 149 requests and enrolled 137 (91.9% of requests) patients. Hospices that were more likely to enroll undocumented immigrants without restriction were non-profit vs. for-profit (68.6% vs. 21.6%, P<0.0001), had larger annual budgets—greater than $4 million (72.7% vs. 40.6%, P=0.0003), and were not affiliated with a chain (63.6% vs. 14.3%, P=0.0002).

**Conclusion.** While a majority of hospices enrolled undocumented immigrants, many limited the number of patients enrolled, and a small number did not enroll undocumented immigrants. Unrestricted enrollment was more common among large, non-profit, independent hospices.

**Implications for Research, Policy or Practice.** Changes in public policy that expand access to hospice for undocumented immigrants may improve the quality of care and reduce end-of-life care costs for this population.
Naloxegol for Treating Opioid-Induced Constipation in Patients with Non-Cancer Pain (S710)
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Objectives
- Become familiar with the safety and efficacy profile of naloxegol as a treatment for opioid-induced constipation in patients with chronic non-cancer pain.
- Understand the mechanism of action of peripherally acting mu-opioid receptor antagonists and how this method of action differs from that of standard laxatives.

Original Research Background. Opioid-induced constipation (OIC) affects 40%–80% of patients receiving opioids to manage chronic non-cancer pain, which can negatively impact quality of life and effective pain management. OIC results when opioid agonist effects at mu-opioid receptors in the enteric nervous system reduce gastrointestinal (GI) transit and secretions. Over-the-counter laxatives are often ineffective. Naloxegol is an approved, orally administered, peripherally acting mu-opioid receptor antagonist (PAMORA) that specifically targets the mechanism of OIC.

Research Objectives. To summarize phase 3 clinical trial data for naloxegol.

Methods. Data were reviewed from two phase 3 randomized, double-blind, 12-week studies conducted in outpatients with non-cancer pain and OIC (KODIAC-04, [NCT01309841]; KODIAC-05, [NCT01323790]) and a 52-week, phase 3 safety study (KODIAC-08 [NCT01336205]).

Results. KODIAC-04 (n=652) and KODIAC-05 (n=700) compared the efficacy (primary endpoint: response over 12 weeks) and safety of daily administration of naloxegol 12.5 or 25 mg vs. placebo. A key secondary endpoint included the 12-week response rate in laxative users with OIC symptoms. Both studies reported significantly higher response rates for naloxegol 25 mg vs. placebo in the overall population and among laxative users with OIC symptoms. KODIAC-08 (n=844) compared the safety and tolerability of naloxegol with usual care, and demonstrated a long-term safety profile similar to that seen in the 12-week studies. In all three studies, most common adverse events (AEs) on naloxegol were GI AEs, which occurred early in treatment, were mild or moderate in severity, and resolved during treatment or after discontinuation. Pain scores and opioid doses remained stable. The mechanism of action of naloxegol will be discussed.

Conclusion. Naloxegol is a safe and efficacious treatment for OIC in adults with chronic non-cancer pain.

Implications for Research, Policy or Practice. Clinicians may consider naloxegol therapy for patients with chronic non-cancer pain reporting OIC.

A Systematic Review of Subcutaneous Medication Dosing Guidelines in Palliative Care (S711)
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Objectives
- Understand the appropriate use and dosing ranges of palliative medications delivered subcutaneously, based on available literature.
- Develop an understanding of how common medications can be delivered by a novel, subcutaneous route.

Systemic Review Background. Subcutaneous medication administration has been a mainstay of palliative care for several decades, offering multiple advantages over both IV and PO administration in many cases. The evidence for conventional administration routes is more developed than for that of the same medications given subcutaneously. Subcutaneous comfort medication use has not been standardized, administration being determined primarily by clinical experience. While this method of practice can be used with reasonable efficacy, particularly in experienced clinicians, there is a need for evidence-based practices to be developed as reference for more standardized care.

Aims. The aim of our systematic literature review was to assimilate the published information for subcutaneous administration of 10 commonly used medications in palliative practice, creating a resource of accepted dosing guidelines.

Methods/Session Descriptions. A comprehensive literature review of major databases was performed following PRISMA guidelines. Attempts were made to include any published literature that included a description of subcutaneous dosing practices for morphine, levetiracetam, ranitidine, metoclopramide, dexamethasone, furosemide, haloperidol, glycopyrrolate, fentanyl, and midazolam. Relevant articles were reviewed, and data on subcutaneous dosing were recorded. Ranges of the studied medications that had been administered safely and efficaciously were compiled.

Conclusion. While there is a dearth of objective data and a lack of FDA approval for subcutaneous administration of most of the medications commonly used in palliative care, an attempt has been made to create a
consensus on best practices for administering these medications. In addition to contributing to patient safety, these guidelines may help expand the usage of comfort medications to a wider variety of drugs, enabling ease of administration across a multitude of settings.

They Said on the Death Certificate . . . But Really What I Think Happened…: Characterizing Cause of Death in VA Medical Centers (S712)

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Objectives

- Learn about next-of-kin’s perspectives on why death occurred for patients receiving care in VA Medical Centers and the importance family members place on how the patient died.
- Learn about the types of circumstances in which next-of-kin do not agree with the official cause of death for patients who died in VA Medical Centers.

Original Research Background. Nearly 20,000 Veterans die each year in VA facilities. The VA is committed to providing next-of-kin with accurate information about the patient’s end-of-life care and cause of death.

Research Objectives. We examine next-of-kin’s accounts of Veterans’ hospital care during the last days of life to explore how family members characterize cause of death.

Methods. In 2005-2010, we interviewed 78 next-of-kin of deceased Veterans in six VA Medical Centers. We used content analysis to explore next-of-kin’s characterization of cause of death and to identify circumstances in which family members disagreed with the official cause on the death certificate.

Results. In next-of-kin’s accounts, death rarely was attributed to a single cause. Instead, next-of-kin described death as a sequence of events or an underlying process involving the interaction of physiological, psychosocial, and transcendent aspects of the patient’s life. Cause of death often was characterized in terms of how the patient died rather than why they died. Next-of-kin tended to question the official cause of death in the setting of multiple morbidity, undisclosed medical conditions, and sudden death when family members were not present.

Conclusion. For next-of-kin, reducing cause of death to a single designation on the death certificate belies the physical, emotional, social, and spiritual complexity of the patient’s circumstances. Instead, next-of-kin characterize cause of death as a series of events or a process with mode of death as a salient component. Multiple morbidity, undisclosed medical conditions, and sudden death without family presence can lead to contested cause of death.

Implications for Research, Policy or Practice. Appreciation of assumptions and circumstances shaping next-of-kin’s perceptions of cause of death can inform medical professionals’ communication with family members. Characterizing death as a process and acknowledging the importance family members place on how the patient died can enhance the efficacy of cause of death discussions. Findings have relevance for policies shaping the context of post-death patient/family-centered clinical practice.

Do Palliative Care and Geriatric Factors Predict 6-Month ER Use in Older Jail Inmates? (S713)

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Objectives

- Understand geriatric conditions and symptom burden in a population of recently incarcerated older adults.
- Understand rates of 6-month ER utilization in this population.
- Discuss the potential appropriateness of utilizing a geriatric palliative care paradigm to improve symptom management and reduce ER use.

Original Research Background. Increasingly, geriatric palliative care aims to target interventions to chronically ill patients with physical and psychosocial suffering prior to the end of life. Among older adults, geriatric palliative care can improve distressing symptoms and reduce ER use. Older jail inmates are a rapidly growing population with disproportionately high rates of multimorbidity, pain, and ER use, yet the appropriateness of geriatric palliative care for this population is unknown.

Research Objectives. Identify the relationship between geriatric and palliative care factors and ER use in older jail inmates.

Methods. Six-month longitudinal study of 101 jail inmates aged 55 or older. Predictors of ER use included sociodemographics; health conditions; pain (Brief Pain Inventory); non-pain physical distress (Memorial Symptom Assessment Scale), psychosocial symptoms (depression [PHQ-2], anxiety [GAD-2]), loneliness (3-item Loneliness Scale); functional impairment (difficulty with Activity of Daily Living) Montreal Cognitive Assessment (MOCA) score <27, and post-release safety concerns. We used X2 tests and multivariate
logistic regression to identify factors associated with ER use.

**Results.** Mean age of participants was 60, 65% were black, 61% had multimorbidity, 57% were functionally impaired, and 85% scored <27 on the MOCA. At baseline, 52% reported pain, 53% experienced physical distress, 37% reported psychological distress, and 46% reported loneliness. At 6 months, 44% used the ER; 21% visited multiple times. Factors associated with ER use included pain (p<0.001), functional impairment (p=0.02), loneliness (p=0.04), multimorbidity (p=0.006), and safety concerns (p=0.002). After adjustment, pain (p=0.02) and safety concerns (p=0.04) remained associated with ER use.

**Implications for Research, Policy or Practice.** Jail is an important setting to test geriatric palliative care paradigms in an effort to minimize suffering and decrease ER use in older inmates.

### Integrated Geriatrics and Palliative Medicine Fellowships: Training Future Leaders to Meet the Demographic and Workforce Needs (S714)

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**Objectives**
- Discuss the benefit of training fellows in an integrated program with dual expertise in geriatrics and palliative medicine.
- Describe the potential benefits of combined and competency-based training programs.
- Summarize position funding strategies, educational methods and special professional development trainings used by integrated programs in geriatrics and palliative medicine.

**Original Research Background.** It is clear that there is a demographic imperative with the aging and chronically ill population growing at a steady speed. Geriatrics and palliative medicine are similar in many aspects, such as an emphasis on inter-professional teams and promoting function, quality of life, and advance care planning. Since both fellowships are a one-year clinical programs, trainees are ill-prepared to enter the academic world.

**Research Objectives.** We proposed an integrated geriatric-palliative medicine fellowship (integrated fellows=IF) that will meet the core competencies requirements in 16 months and allow for 8 months of professional development focusing on leadership skills.

**Methods.** We designed an integrated curriculum allowing fellows protected time to develop competencies in either research, education or administration, improving leadership training and addressing public health needs. The programs were modified by taking advantage of several overlapping requirements, such as home care and decreased the number of inpatient and outpatient rotations, to focus more on academic development. In 2012, American Board of Internal Medicine (ABIM) approved a competency-based pilot at the Icahn School of Medicine at Mount Sinai, and in 2014, University of Texas Health Science Center at San Antonio was approved as the second site. ABIM supported pilot programs with faculty development and tools in competency-based assessments. Academic production was measured by number of national presentations, special professional development trainings achieved, and current jobs plans.

**Results.** As of July 1, 2015, we have graduated six IFs and enrolled 13 new IFs. To date, IFs have presented 19 abstracts at national meetings and completed 15 professional development trainings, and 100% of IFs have pursued academic-leadership careers.

**Conclusion.** This competency-based fellowship has given fellows more opportunities to develop skills that will prepare them for faculty or leadership positions.

**Implications for Research, Policy or Practice.** IF training programs may foster the development of leaders in both fields due to the overlapping of competencies and serve as a model for other potential collaborations.

### Advance Directives Among Nursing Home Residents with Mild, Moderate and Advanced Dementia (S715)

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**Objectives**
- An understanding of which demographic factors are most likely to impact completion of advance directives in nursing home residents with dementia.
- An understanding of which clinical stages of dementia are most likely to be associated with advance directives among nursing home patients.
Original Research Background. For nursing home residents with complex care needs, particularly those with dementia, advance directives (ADs) provide essential guidance around medical decision-making. Identifying factors affecting AD completion is crucial to improving patient-centered care and efficiency of care in this population.

Research Objectives. To describe the prevalence of ADs among nursing home residents with mild, moderate, or advanced stage dementia and resident factors associated with ADs.

Methods. We constructed a cohort of nursing home residents from five states in the U.S. (Minnesota, Massachusetts, Pennsylvania, Florida, California) in 2007 and 2008. Residents were identified and assessed using the Minimum Data Set 2.0 (MDS) linked to Medicare claims (Parts A and D) and the Medicare denominator file. Eligible residents were aged 65 and older and had a duration of stay \( \geq 90 \) days and a diagnosis of dementia and a Cognitive Performance Scale (CPS) score \( \geq 1 \). Stage of dementia was classified using the CPS. ADs were defined as the presence of a living will; do-not-resuscitate order (DNR); or do-not-hospitalize (DNH) order, medication restriction, and feeding restriction. Logistic regression was used to identify resident characteristics associated with ADs.

Results. The final sample size was 226,926. Overall, forty percent (n=91,547) had no AD. Presence of DNR, DNH, feeding restriction and medication restriction orders increased with dementia severity. In adjusted analysis, older age, female sex, white race, higher education, and being married or widowed were associated with the presence of an AD (all p’s < .001).

Conclusion. ADs are more common among nursing home residents with advanced stages of dementia. Presence of ADs is influenced by a number of demographic factors.

Implications for Research, Policy or Practice. This study adds to growing evidence identifying factors influencing AD completion. A greater understanding of how such factors impact care planning will help address barriers to patient-centered care for this population.

Hospice Admission Following Community-Based, Specialist-Level Palliative Care: Incidence, Timing and Predictors (S716)
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Objectives
- Understand the rate of hospice conversion during long-term interdisciplinary, community-based palliative care, and describe the sociodemographic and clinical factors that predict this conversion.
- Understand sociodemographic and clinical factors that may predict hospice referral timing after community-based, specialist-level palliative care using statistical evidence.

Original Research Background. Community-based palliative care is emerging to support seriously ill homebound patients. Timely referral to hospice is a key objective. Interdisciplinary palliative care models may provide repeated opportunities to facilitate appropriate hospice admission. We conducted a retrospective cohort analysis of a large sample to explore hospice utilization after enrollment in one such model.

Research Objectives. To evaluate the incidence and timing of hospice conversion after enrollment in a palliative care program.

Methods. Patients (n=1505) were enrolled during 2010-2013 in a community-based, ‘high-touch’ model of specialist palliative care that included home visits by an MD/NP and social worker, telephonic outreach by an RN specialist, and access to 24/7 on-call care. Data entered into an electronic medical record at the time of service were extracted for this analysis. Outcomes included hospice admission (yes/no) and duration of palliative care enrollment, and covariates included sociodemographics, diagnosis, Karnofsky Performance Status (KPS), referral source, and insurance status.

Results. The sample had a mean age of 71.6 years (SD=14.5) and was 58.7% women, 32.9% White, 29.8% Black, and 28.5% Hispanic. The mean length of stay (LOS) in the palliative care program was 310 days; median was 210 (range 1-1589). A total of 334 patients (22.2%) were admitted to hospice. In multivariate analysis, predictors of hospice admission were shorter LOS in palliative care (p<0.001), cancer diagnosis (p<0.001), lower KPS (p<0.001), and lower poverty level (p=0.03). The only significant predictor of a longer LOS was higher KPS (p<0.01).

Conclusion. During months of care by a ‘high-touch’ palliative care model, about one-fifth of patients were admitted to hospice, and relevant predictors of this outcome included cancer diagnosis, lower performance status, and higher socioeconomic status.
Implications for Research, Policy or Practice. Additional studies are needed to establish benchmarks for hospice conversion in varied types of community-based palliative care programs.

The Interdisciplinary Hospice “Healing the Healer Group”: A Qualitative Study of the Effects of a One-Year Pilot Educational Program (S717)
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Objectives
- Understand the theoretical basis for this educational program’s design and implementation.
- Understand the common themes present in the cases presented by the participants in the Healing the Healer Group.
- Understand the effects of the program on participants, including both benefits and challenges.

Original Research Background. Healthcare workers, including hospice providers, are at risk for compassion fatigue and burnout. Few workplace interventions are described and evaluated in the literature.

Research Objectives. This study aims to evaluate 1-year outcomes of a pilot educational program designed to foster professional formation and decrease burnout in interdisciplinary hospice providers.

Methods. Educational approach. We developed the “Healing the Healer Group” program for hospice providers, drawing from medical education, chaplaincy, social work and nursing literature. Key design elements: learning through reflection on practice, focus on complex patient/family interactions, healing through storytelling, learning from peers, safety, and support. The 1-hour small group format includes: relaxation exercises, discussion of a spontaneous “case” by a participant, group reflection, and sharing of best practice approaches to challenges. In July 2014, we began monthly groups for clinicians (RNrs, MSW, chaplains, MD) and a separate group for hospice aids. Evaluation: A multi-method qualitative approach included analysis of session field notes, written feedback after 6 months, and a semi-structured individual participant interviews after 1 year. Qualitative analysis, conducted by three researchers, uses the immersion crystallization method. IRB approval obtained.

Results. All hospice team members have participated. Interviews will be completed by September 2015. Analysis is ongoing. Themes in cases include: watching suffering, boundaries, emotional attachments, feeling alone, control, and dealing with chaos. Interviews and written feedback to date reflect learning and growth through the program. Themes include: rich experiences, value of safe space to “deal with difficult problems,” power of learning from colleagues (“mind expanding”), and “uninterrupted story telling is healing.” Format strengths: small group size, safety, spontaneous cases, and skillful facilitation. Challenge: protected time. All participants recommend continuing the program.

Conclusion. This pilot Healing the Healer Group appears to have the potential fill a significant need in the professional lives of hospice workers.

Implications for Research, Policy or Practice. Program expansion with further study is needed.

Pilot of “Honoring Choices Wisconsin” in an Academic Center: Navigation, Engagement and Outcomes (S718)
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Objectives
- Understand the key features of the “Honoring Choices” format for advanced care planning (ACP).
- Review the strategies for implementation of this model in the ambulatory setting in patients with advanced cancer and potential outcomes of successful completion of the program.

Introduction. “Honoring Choices (HC) Wisconsin” is an initiative, sponsored by the Wisconsin Medical Society, that utilizes an advanced care planning (ACP) framework modeled after the “Respecting Choices” program. The goal of HC is to make facilitated and standardized ACP conversations part of routine medical care.

Objectives. Pilot the feasibility of the “Honoring Choices” in a tertiary setting and to measure the impact of program completion on patient outcomes.

Methods. Over eight months, a team of physicians, nurses, social workers and chaplains underwent facilitator training and implemented the HC quality improvement process. Oncology patients (inpatient and ambulatory) of four Cancer Center physicians were targeted for inclusion. Demographics, process measures, and outcomes included workflows, time in consultation, facilitator and patient satisfaction, patient location of death, and DNR status.

Results. HC was offered to 64% (294/460) of patients. Facilitator conversations were scheduled for 101 patients; 95 were documented in the medical record. Completed advanced directive documents were obtained from 41 patients. Facilitators reported high satisfaction with the process. Findings included low utilization of ACP tools in the medical record and
considerable RN coordination of care for clinic workflows. Conversations averaged 30 minutes, and completion of documents happened more frequently within the inpatient than ambulatory setting. Thirty patients died since completion of the pilot, of which 40% (n=12) had accepted HC and had completed advance plans. Compared to the non-HC group, the HC group was more likely to spend their final days in hospice care (91.7% vs. 55.6%, p=0.199).

Conclusions. HC provides a mechanism for culture change around ACP with substantial impact on patients and providers. Our pilot suggests implementation is feasible yet requires considerable change in workflows and resource allocation. Patients who completed HC were more likely to have a location of death consistent with expressed wishes.

**Getting to the Heart of the Matter... Results from a Regional Survey of Hospice Providers Regarding the Care of Patients with Advanced Heart Failure (S719)**


Objectives

- List perceived barriers to the care of patients with advanced heart failure in hospice settings.
- Identify opportunities to improve the care of patients with advanced heart failure in hospice settings.

Original Research Background. Advanced heart failure (HF) therapies, including inotropes and ventricular assist devices (VADs), may temporarily improve symptoms, function, and longevity for select patients. However, the role of these therapies in hospice care has not been well defined. This study was designed to describe the variation in practice as a needs assessment in improving care for advanced HF patients.

Research Objectives. To describe the attitudes of hospice providers related to caring for patients with advanced HF therapies.

Methods. At an advanced HF summit held at MedStar Washington Hospital Center, an 18-item multiple-choice survey was distributed to metropolitan DC area hospice leaders in May 2015. Survey topics included demographic information about the hospice (census, HF population, services), experience caring for HF patients (such as presence of clinical algorithms, coverage for inotrope therapy), and opinions about barriers and preferences for training. Responses were analyzed using descriptive statistics.

Results. Nineteen hospice leaders were represented at the summit and completed the survey (100% response rate). Respondents were in administrative (11/19) and clinical (11/19) leadership roles. Most respondents felt access to hospice for HF patients was adequate/somewhat adequate (13/19), but timing of referrals was too late (18/19). Fifteen (79%) respondents reported not having algorithms for HF management. Ten (53%) respondents reported inotropes were cost prohibitive. Of those, 90% felt that they would cover inotrope costs if they were comparable to the cost of parenteral opioids. Fourteen (74%) respondents reported lack of experience with inotropes, and 18 (95%) indicated interest in clinical training/support.

Conclusion. As a result of this survey, we identified lack of experience, cost, and late referrals as barriers to providing advanced therapies for HF in a hospice setting.

Implications for Research, Policy or Practice. Opportunities to improve care include clinical training, establishing clinical protocols, and co-management with advanced HF specialists.

**Advance Care Planning and Its Influence on Life-Prolonging Treatments Before Patients’ Deaths (S720)**

Jooyoung Cheon, MSN RN, University of Maryland, Baltimore, MD.

Objectives

- Comprehend the effect of advance care planning (ACP) on the decisions regarding life-sustaining therapy (LST) before patients’ deaths.
- Identify demographic, socio-economic, and disease-specific factors influence on final decisions regarding LST before patients’ deaths.

Original Research Background. Advance care planning (ACP) refers to the whole process of discussion of end-of-life (EOL) care for future medical care and usually includes living will (LW), durable power of attorney for health care (DPAHC), and discussion regarding EOL care preferences with others.

Research Objectives. This study aimed to determine the impact of ACP on life-prolonging treatments (LPTs) before patients’ deaths.

Methods. This study used data from the Health and Retirement Study Exit Interviews. The inclusion criteria were patients 1) who were aged 50 and older, 2) who died between 2000 and 2012, 3) who had made any decision regarding all possible care to prolong life, and 4) who belonged to one of the following four groups: no ACP (group one), discussion only
The patients’ mean age of death was 79.9 years. A quarter of patients received LPTs. This percentage in each group was 20.2% in group one, 18.2% in group two, 16.4% in group three, and 45.3% in group four. Factors associated with LPTs were as follows: having discussion combined with DPAHC (group three), having discussion combined with DPAHC and LW (group four), African-American, high school graduation, having children who reside with patients, and having private insurance. Patients who had all types of ACP were 76% less likely to receive LPTs than patients who had no ACP (OR: 0.24, 95% CI: 0.17–0.32).

Conclusions. Patients who had more types of ACP received less treatment to prolong life. This result enhances the importance of having all types of ACP.

Implications for Research, Policy or Practice. Developing interventions to increase completion of all types of ACP is suggested.

I Had No Idea He Was Dying: Barriers to Meaningful Communication About Life-Limiting Illness (S721)
Deborah Waldrop, LMSW MSW, University at Buffalo, Buffalo, NY. Jacqueline McGinley, MSW, University at Buffalo, University of Maryland.

Objectives
- Understand the elements of and barriers to meaningful and effective communication about a terminal prognosis.
- Identify the important aspects of the advance care planning (ACP) process from caregivers’ perspectives.

Original Research Background. Communication with healthcare providers is critical for helping family caregivers understand and manage changes from a life-limiting illness. The majority of surrogate decision-makers for people who are critically ill want physicians to discuss the prognosis even when they are uncertain. Knowledge of a dying person’s wishes are central in healthcare decision-making and may influence the quality of care at life’s end contributing to bereaved caregivers’ coping and adaptation to loss.

Research Objectives. The purpose of the study was to explore bereaved caregivers’ perceptions of how the nature of (1) communication with healthcare providers and (2) advance care planning (ACP) influenced experiences at life’s end.

Methods. The study design was exploratory and longitudinal. The results of Time 1 in-depth interviews with 108 bereaved caregivers whose loved one died 4 months before while in hospice care are presented. Interviews were audiotaped, professionally transcribed, and submitted to iterative qualitative data analysis. Frequencies and descriptive statistics were calculated.

Results. Participants reported that 90% of those who died had specific end-of-life wishes and 86% had a written advance directive, yet 27% had some type of treatment that was inconsistent with expressed wishes. 56% reported having a family meeting; the formats ranged from brief hallway conversations to formal planned interdisciplinary conferences. 50% of the participants rated the quality of the communication as less than clear, leaving them with unmet needs. Four themes illustrated the elements of poor provider communication: (1) insufficient information, (2) inappropriate location, (3) insensitivity, and (4) avoidance of the terminal prognosis.

Conclusion. Family caregivers need providers to initiate conversations about a terminal trajectory and guidance to help them prepare for an approaching death.

Implications for Research, Policy or Practice. Sound communication and ACP honoring patients’ wishes involves the honest presentation of prognosis, options for care, and emotional sensitivity in an interdisciplinary environment that facilitates comprehension.

Characterizing End-of-Life Care for Uninsured and Undocumented Immigrant Patients in a City Hospital Center (S722)
Janeen Marshall, MD, Icahn School of Medicine at Mount Sinai, New York, NY.

Objectives
- Identify characteristics and patterns of utilization of uninsured and undocumented patients in need of palliative care services.
- Identify care gaps in palliative care delivery to undocumented and uninsured patients and areas for intervention, such as policy or systems changes.

Original Research Background. In 2014, the World Health Organization (WHO) mandated that access to palliative care and hospice be accessible for all. Care for uninsured and undocumented (UAU) patients continues to be a struggle for health systems in the US. Limited data is available regarding palliative care and hospice services for these patients.

Research Objectives. To characterize the provision of service, clinical course and outcomes for UAU patients in need of palliative care and hospice services.

Methods. Clinical and demographic data from UAU patients followed by the Palliative Care Consult Service (PCCS) at Elmhurst Hospital Center from 12/1/2013
to 11/30/2014 was obtained. Undocumented status was indicated on the initial intake form. Diagnoses, reason for consult, length of stay, PCCS interventions and discharge disposition were analyzed.

**Results.** 428 patients were referred to the PCCS. 40.2% were 18-65 years old, and 59.8% were >65 years old. 49.8% were female. Approximately 11% of these patients died within 2 days of completion of their PCCS consultation. 14% of patients were identified as UAU. More than 1/3 of these patients returned home with no palliative care services due to undocumented status and returned frequently to ED for symptom exacerbations. The most common reason for consult for these patients was discharge planning/placement, and for four of these patients, the ultimate disposition was remaining in the city hospital until their death due to their lack of insurance and their undocumented status.

**Conclusion.** To date, very little data on the experience of undocumented and uninsured patients exists outside of anecdote and case report. Characterizing the end-of-life care in the uninsured and undocumented patients provides much needed data to help hospital systems provide palliation and discharge to appropriate care systems for this vulnerable population.

**Implications for Research, Policy or Practice.** Characterization of care for this vulnerable population allows for identification of policy and system changes that may allow palliative care to reach this vulnerable patient population.

**Randomized, Double-Blind, Placebo-Controlled Study of Methylphenidate for Treatment of Depression in Cancer Patients Enrolled in Hospice or Receiving Palliative Care (S723)**

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**Objectives**
- Understand the efficacy of methylphenidate for depression treatment in cancer patients receiving hospice or palliative care.
- Understand the safety of methylphenidate for depression treatment in cancer patients receiving hospice or palliative care.

**Original Research Background.** Major depressive disorder can be diagnosed in up to 49% of patients with advanced cancer. This disorder causes suffering and is associated with suicidality and increased pain. Traditional antidepressants in cancer patients in hospice or receiving palliative care are complicated by shortened life expectancy, as they take several weeks to reach effectiveness. Methylphenidate has been reported in case series as a rapidly effective treatment for depression.

**Research Objectives.** To determine the safety and efficacy of methylphenidate for depression treatment in cancer patients receiving hospice or palliative care.

**Methods.** An 18-day randomized, double-blind clinical trial of methylphenidate for depression in eligible patients with advanced cancer who were enrolled in hospice or receiving palliative care. Patients were randomized to receive methylphenidate plus a selective serotonin reuptake inhibitor (SSRI) versus placebo plus SSRI.

**Results.** In total, 46 patients were enrolled, however 14 were excluded before randomization or did not receive study drug. At day 18, 84.6% of the methylphenidate and 60% of the placebo group were in depression remission (p = NS), which was measured as a >50% reduction in score on the clinician-rated Montgomery-Asberg Depression Rating Scale. Mean time to remission of depression was 10.3 days (SE 1.77) in the methylphenidate and 8.1 days (SE 1.31) in the placebo group (p = 0.38, log rank test). HADS scores from baseline to day 18 were not statistically different between the two groups. Methylphenidate was well tolerated with few side effects, and mortality was not different between the two groups.

**Conclusion.** This clinical trial was unable to support the primary hypothesis that methylphenidate decreases depression in cancer patients in hospice or receiving palliative care. Low enrollment and higher than anticipated remission rates impacted comparisons. Methylphenidate was well tolerated with few side effects in this patient population.

**Implications for Research, Policy or Practice.** Our study underscores the difficulties in conducting randomized controlled trials for symptom management in patients with shortened life expectancy.

**Measurement of Pain and Health-Related Quality of Life Measures in Adult Males with Hemophilia: Initial Observations of Disease Impact (S724)**

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**Objectives**
- Understand the type of painful symptoms experienced by the hemophilia population.
- Understand that pain impacts not only the physical joint, but has consequent effects on the mental health of the hemophilia patient.
Original Research Background. Hemophilia is a rare genetic bleeding disorder characterized by acute, painful bleeds as well as chronic arthropathy. No standardized recommendations exist to measure pain and its subsequent impact on health-related quality of life (HRQoL) measures in adult patients with hemophilia (PWH).

Research Objectives. To assess pain and HRQoL in adult PWH treated at Mount Sinai Hemophilia Treatment Center (MSHTC) using a hemophilia-specific survey tool.

Methods. All English-speaking adult male PWH >18 years old who were treated at MSHTC received the HRQoL assessment instrument to complete either by mail at home or during a clinic visit.

Results. 38/144 (26%) PWH completed the questionnaires, with 27/35 (77%) completed at home. Of 13 joints surveyed, the most commonly reported joints and degree of pain were: right knee 16/19 (84%), left ankle 16/17 (94%), right elbow 16/17 (94%) and left knee 13/15 (87%). In PWH, 14/34 (41%) reported the most frequent cause of joint pain was from bleeding episodes; 13/34 (38%) reported chronic joint pain as the cause. 34/34 (100%) of PWH reported daily pain without medication; 15/31 (48%) reported no pain after the injection of factor. 15/32 (47%) of PWH experienced their worst pain symptoms at night; 11/32 (34%) reported their worst pain in the morning. Only 9/34 (26%) of PWH reported chronic joint pain as the cause. 34/34 (100%) of PWH reported daily pain without medication; 15/31 (48%) reported no pain after the injection of factor. 15/32 (47%) of PWH experienced their worst pain symptoms at night; 11/32 (34%) reported their worst pain in the morning. Only 9/34 (26%) of PWH reported chronic joint pain as the cause. 34/34 (100%) of PWH reported daily pain without medication; 15/31 (48%) reported no pain after the injection of factor. 15/32 (47%) of PWH experienced their worst pain symptoms at night; 11/32 (34%) reported their worst pain in the morning. Only 9/34 (26%) of PWH reported chronic joint pain as the cause. 34/34 (100%) of PWH reported daily pain without medication; 15/31 (48%) reported no pain after the injection of factor. 15/32 (47%) of PWH experienced their worst pain symptoms at night; 11/32 (34%) reported their worst pain in the morning. Only 9/34 (26%) of PWH reported chronic joint pain as the cause.

Conclusion. Assessment of pain and HRQoL demonstrates a high burden of unmeasured and untreated symptoms in PWH.

Implications for Research, Policy or Practice. PWH suffer from acute and chronic pain with resultant effects on HRQOL; methodologic assessment tools can uncover this and offer opportunities for improved comprehensive symptom management.

Personal Growth, Symptom Burden and Uncertainty in Heart Failure (S725)

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Objectives

- Define personal growth and explain its potential relevance to palliative care research.
- Understand levels of personal growth in adults with heart failure.

- Examine relationships among personal growth, symptom burden, uncertainty, age, sex, ethnicity, time since diagnosis, and disease severity.

Original Research Background. Heart failure (HF) is a chronic disease associated with unpredictable trajectories, significant symptom burden, and diminished quality of life (QOL). National guidelines recommend that palliative care (PC) be considered in early stages of life-limiting chronic illnesses, such as HF. Personal growth (PG), which is the ability to perceive positive psychosocial outcomes through significant adversity, is now being examined in addition to QOL in people with serious illnesses, but it has been little studied in HF. Increases in PG have been associated with improved QOL, morbidity, and mortality and decreased levels of pain, fatigue, depression, and anxiety in other serious illnesses.

Research Objectives. To measure levels of PG in HF subjects and examine relationships among PG, symptoms, uncertainty, demographic and clinical factors.

Methods. Subjects (N=103) with NYHA class II-IV HF participated in this exploratory study. Measures included the Posttraumatic Growth Inventory, Mishel Uncertainty in Illness Scale-Community Version, and Memorial Symptom Assessment Scale-HF.

Results. Subjects reported moderate levels of PG (M=48.6, SD=28.62), symptom burden (M=2, SD=0.4), and uncertainty (M=52.9, SD=14.24). Older subjects reported less personal growth (r=-.20, p<.05) and had more advanced disease (r=.28, p<.01). Uncertainty was associated with more advanced disease (r=.28, p<.01) and higher symptom burden (r=.49, p<.01). Subjects with higher symptom burden reported greater PG (r=.20, p<.05). Study variables did not independently predict PG in multivariable models.

Conclusion. Despite receiving evidence-based care, HF subjects only reported moderate levels of PG, and they still reported moderate symptom burden and uncertainty related to their diagnosis, treatment, and the future. Facilitating PG may require psychosocial and spiritual support, traditionally lacking in standard HF management.

Implications for Research, Policy or Practice. HF patients might benefit from earlier PC, which uses an interdisciplinary approach, integrates psychosocial and spiritual support, and focuses more explicitly on symptom management. More studies are needed to evaluate the need to measure and follow PG among patients with chronic illnesses such as HF.
**Bereaved Parents Experience of a Hospital Memorial Service (S726)**

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**Objectives**
- Understand reasons a bereaved parent chooses to return to the hospital for a memorial service.
- Identify elements of a hospital memorial service that parents identify as most beneficial.

**Original Research Background.** 77% of children’s hospitals participating in a palliative care survey reported offering a hospital-based memorial service (Feudtner, 2013), yet little is known about bereaved parents’ experiences of attending such a service.

**Research Objectives.** This paper reports preliminary findings from an exploratory, qualitative study to understand: why bereaved parents choose to attend a memorial service, what service elements parents consider most/least beneficial, and how a hospital memorial service can best meet bereaved parents’ needs.

**Methods.** Parents experiencing a perinatal, neonatal, or pediatric death, and attending one of three yearly hospital-based memorial services, were invited to participate (Current n=15). In-person, semi-structured interviews were conducted within one month of memorial service attendance by a chaplain researcher trained in supporting bereaved families; interviews were recorded and transcribed verbatim. Each interview was coded by two members of the interdisciplinary research team using Atlas.ti7 for data management. Thematic analysis was applied to each final coded transcript, followed by analysis matrices development to look at major themes across parent interviews.

**Results.** This study is in the last phase of data collection, with final analysis projected by December, 2015. Emerging themes from 15 completed interviews include: a sense of community with fellow bereaved parents and the importance of others joining the parents in remembering their child through ritual.

**Conclusion.** Bereaved parents who return to the hospital for a memorial service value the opportunity to honor their child in a supportive setting. Parents report finding comfort in connecting to their child through memorial service ritual.

**Implications for Research, Policy or Practice.** Future research is needed to understand the ongoing impact of memorial service attendance on bereaved parents, including rituals they may choose to adopt or continue after returning home. Children’s hospitals are encouraged to establish or further refine memorial services in support of grieving parents.


**Oncology Providers’ Perceptions of Early/Concurrent Palliative Care (S727)**

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**Objectives**
- Describe perceptions of palliative care among diverse populations of healthcare providers, including oncologists.
- Describe the development and validation of an original survey instrument.

**Original Research Background.** Despite consensus opinion that early integration of palliative care is an essential component in the care of cancer patients, specialist palliative care remains poorly integrated into standard oncology care. Oncologists’ attitudes and perceptions towards specialist palliative care may play a key role in successful or poor integration, however this relationship has undergone little systematic study.

**Research Objectives.** To characterize oncology providers’ perceptions of early/concurrent palliative care.

**Methods.** Based on literature review and expert feedback, we systematically developed a survey to measure oncology providers’ perceptions of palliative care. The survey was administered electronically, from November 2014 to July 2015, to oncology providers at four southeastern U.S cancer centers where an early palliative care delivery model is being implemented.

**Results.** Thirty-six oncology providers completed the survey. Average age was 46; 42% were male (n=15), and average time in practice was 13.4 years. 73% (n=27) of respondents reported that oncologists should care for advanced cancer patients along with specialist palliative care, and 27% (n=10) endorsed that oncologists alone should provide oncology and palliative care. 92% (n=34) reported that advanced cancer patients would benefit from early palliative care, and 90% (n=33) thought consulting with palliative care specialists adds value to care. However, more than 40% of respondents believed discussion of palliative care would cause patients and families to lose hope and feel that “nothing more can be done.”

**Conclusion.** Oncology providers generally believe that specialty palliative care benefits patients...
newly-diagnosed advanced cancer. The optimal timing and degree of palliative care involvement remain variable among providers.

**Implications for Research, Policy or Practice.** The survey will be re-administered to reassess oncology providers’ perceptions of early palliative care after implementation of the early palliative care delivery model and to examine whether providers’ perceptions are associated with successful palliative care integration.

**Oncology Massage Duration and Effects on Symptom Expression in Cancer Patients and Caregivers (S728)**

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**Objectives**
- Learn about benefits of oncology massage as a manual therapy for symptom relief, including impact of massage duration on symptom expression.
- Understand the benefits of oncology massage related to both cancer patients and caregivers in the outpatient setting.

**Original Research Background.** Massage as a manual therapy has shown benefit for symptomatic relief in cancer patients and their caregivers.

**Research Objectives.** We explored the impact of a single massage session on self-reported symptoms, including impact of massage duration on symptom expression.

**Methods.** Data were reviewed from massage sessions (30- or 60-min duration) at our Integrative Medicine Center outpatient clinic (5/2011-12/2013). Participants completed the Edmonton Symptom Assessment Scale (ESAS; 10 symptoms, 0-10 scale, 10 most severe) pre- and post-massage. ESAS subscales analyzed included Physical Distress (PHS, 0-60), Psychological Distress (PSS, 0-20), and Global Distress (GSD, 0-90). Baseline scores were compared (patient vs. caregiver) using Wilcoxon rank-sum tests. Pre/post score differences were compared using 2-way ANOVA models.

**Results.** 585 initial massage visits (491 patients; 93 caregivers) were analyzed. Symptoms with highest scores (means) at baseline were the same for patients and caregivers [sleep; fatigue; well-being]. Comparing ESAS subscales (means) at baseline, there was no statistical difference between patient and caregiver PSS (4.08 vs 4.3; p=0.6) or GSD (19.6 vs 15.9; p=0.06); PHS was significantly different (12.4 vs 8.4; P=0.001). GSD was significantly reduced after a single massage for both patients (19.60 to 12.45; p<0.001) and caregivers (15.92 to 10.78; p<0.001). For anxiety only, caregivers experienced a significantly greater reduction than patients [-1.91 vs -1.30; p=0.03]. Looking at all participants, a 60-min massage resulted in a significantly greater improvement in anxiety, well-being, and GSD than a 30-min massage (all p’s ≤ 0.005).

**Conclusion.** A single 30- or 60-min massage session resulted in acute relief of self-reported symptoms in patients and caregivers.

**Implications for Research, Policy or Practice.** Further study is warranted regarding necessary dose (duration, frequency) of massage to maintain effective symptom control.

**Efficacy of Acupuncture (ACU) Therapy for Cancer-Related Pain Management in Oncology Patients (Pts) (S729)**

Jai Patel, PharmD, Levine Cancer Institute, Charlotte, NC. Connie Edelen, MD FAAPMR, Carolinas Healthcare System, Charlotte, NC. Katherine Miller Levine Cancer Institute, Matthews, NC. James Symanowski, PhD, Levine Cancer Institute, Charlotte, NC.

**Objectives**
- Understand the role of acupuncture in cancer symptom management.
- Identify characteristics of oncology patients and cancer symptoms that respond favorably with acupuncture.

**Background.** Cancer-related pain negatively affects symptom burden, morbidity, and mortality. Evidence suggests the use of ACU to relieve cancer-related pain. We investigated ACU efficacy and patient-specific factors associated with pain improvement.

**Methods.** Medical charts were reviewed from oncology patients receiving ACU and concurrent palliative medicine management. Pre- and post-ACU pain scores, as assessed by the Edmonton Symptom Assessment Scale (ESAS), were measured at each session. Univariate logistic regression models, including an over-dispersion parameter to account for multiple observations per patient, were used to investigate the association between patient-specific variables (Table 1) and significant pain improvement, defined as a ≥ 2-point reduction in ESAS pain score, at each session.

**Results.** A total of 122 ACU sessions from 55 patients were included in the analysis. Significant pain improvement was observed in 47% of all sessions (mean reduction 1.8). Baseline non-neuropathic pain was significantly associated with a higher odds of achieving pain reduction (OR 2.351; P=0.047). Conversely, an opposite association was identified for...
baseline neuropathic pain (OR 0.421; P=0.048). Age, stage, number of sessions and tumor type were not significantly associated with pain improvement, although several trends were noted (Table 1).

**Conclusions.** ACU is an appropriate adjunct therapy for cancer-related pain, particularly for non-neuropathic pain. Larger studies to confirm patient-specific variables and further investigation into therapy related side effects will assist in determining a personalized approach to ACU therapy in the oncology population.

### Table 1

<table>
<thead>
<tr>
<th>Covariate</th>
<th>Odds ratio (95% CI)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (&gt;57 vs. ≤57 years)</td>
<td>0.501 (0.206-1.219)</td>
<td>0.128</td>
</tr>
<tr>
<td>Indication</td>
<td>2.351 (1.012-5.459)</td>
<td>0.047</td>
</tr>
<tr>
<td>Non-neuropathic pain (yes vs. no)</td>
<td>0.501 (0.206-1.219)</td>
<td>0.128</td>
</tr>
<tr>
<td>Neuropathic pain (yes vs. no)</td>
<td>0.421 (0.179-0.992)</td>
<td>0.048</td>
</tr>
<tr>
<td>Stage (3-4 vs. 0-2)</td>
<td>2.004 (0.791-5.075)</td>
<td>0.143</td>
</tr>
<tr>
<td>Number of sessions (&gt;3 vs. ≤3)</td>
<td>0.379 (0.125-1.152)</td>
<td>0.087</td>
</tr>
<tr>
<td>Tumor type</td>
<td>-</td>
<td>0.467</td>
</tr>
</tbody>
</table>

* Median age
* Stratified by breast, gastrointestinal, genitourinary, thoracic, gynecologic, hematologic, neurologic, and other cancers, and analyzed as a categorical variable.

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**The Power of a Plan: The Impact of Palliative Care Decisions at Hospital Discharge on Readmission Rates (S730)**

Joshua Fabie, MSII, Georgetown University, Washington, DC. Kathryn Walker, PharmD, BCPS CPE, MedStar Health, University of Maryland School of Pharmacy, Baltimore, MD. Christopher Kearney, MD, MedStar Health, Ellicott City, MD.

**Objectives**
- Describe the differences in hospital readmission rates and associated charges between patients with a palliative plan of care and no palliative plan at discharge.
- Describe the differences between early/late consultation and the plan of care on the index admission charges.

**Original Research Background.** Hospital readmission (RA) rates are recognized as a marker of quality and tied to hospital reimbursement. This study describes the impact of early palliative care (PC) consultation in the hospital and the discharge plan of care on the rate of RA for PC patients.

**Research Objectives.** 1) To compare RA rates and charges for patients choosing a PC plan versus non-palliative plan post-hospitalization. 2) To compare differences in hospital charges between early consultations and plans of care.

**Methods.** All patients receiving PC consultation and surviving to discharge in three Baltimore hospitals (12/12-4/13). Financial reports, Social Security Death Index, and chart review were used for data collection. Palliative care plan of care (PCPOC) was defined as post-discharge plans that focused primarily on comfort (e.g., hospice), and non-palliative plans of care (NPPOC) represented usual care. Adjusted RA data represents only patients alive at each time-point. Early consultations were performed ≤3 days on index hospitalization.

**Results.** 180 patients were included in this study, and 53% were consulted early. Overall, 64% agreed to a PCPOC at discharge. Index admission charges were less for early consultations ($22,566, p*) and for those leaving the hospital with a PCPOC (*p*). At 30 days post-hospitalization, mortality was higher in the PCPOC group (80% vs 29%, *p*), and overall RA rates were higher in the NPPOC group (42% vs 7%, *p*). When adjusted for mortality, RA rates were higher in the NPPOC group (45% vs 21%, *p*). RA charges were higher per patient ($7,031) and per RA ($9,646) for the NPPOC group at 30 days.

**Conclusion.** PCPOC and early PC consultation are associated with decreased hospital utilization.

**Implications for Research, Policy or Practice.** Future research should further determine the impact of PCPOC and timing of PC consultation on hospital use and RA.

**Pediatric Palliative Care Training in Fellowship: A National Survey of Adult Palliative Medicine Fellowship Directors and Pediatric Rotation Directors (S731)**

Sonia Malhotra, MD MS, Ochsner Medical Center, Section of Palliative Care, New Orleans, LA. Robert Arnold, MD FAAHPM, University of Pittsburgh, Pittsburgh, PA.

**Objectives**
- Outline the current state of education and clinical training of adult hospice and palliative medicine (HPM) fellows in pediatric palliative care (PPC).
- Compare responses between adult HPM fellowship and pediatric rotation directors regarding the future of PPC education and training.

**Original Research Background.** With only seven pediatric palliative care (PPC) programs in the country, there is a lack of PPC physicians. Large numbers of pediatric patients are cared for by palliative physicians trained in adult fellowships. Adult HPM fellowships require pediatric training, but little is known about what is taught and what educators’ thoughts are about this training.
Research Objective. To describe adult HPM fellows’ clinical and educational exposure to PPC.

Methods. An electronic survey was sent to adult HPM fellowship directors and their respective pediatric rotation directors. The survey elicited information about PPC learning objectives, didactics, and fellows’ PPC clinical experience. Finally, directors’ attitudes about the current and future state of PPC training was surveyed. Data was de-identified, and descriptive statistics, Chi-square, and sample t tests were analyzed.

Results. 41 of 98 adult HPM fellowship directors and 36 of 80 pediatric rotation directors responded (response rates 42% and 45%, respectively). Most programs indicated their fellows spend time observing PPC teams manage symptom and communication issues rather than independently managing patients with supervision. For example, only 9 of 36 programs allowed adult fellows to independently convert opioids with supervision. Fellowship and pediatric rotation directors felt somewhat (46%) or very (17%) uncomfortable with adult HPM fellows practicing PPC. Fellowship and pediatric rotation directors disagreed about whether they would be likely to develop a pediatric track within their programs (p=0.04).

Conclusion. Most adult HPM fellows are observing PPC teams rather than learning to independently manage patients. Both groups of respondents indicated discomfort with adult HPM fellows practicing PPC.

Implications for Research, Policy or Practice. This study highlights that pediatrics rotations need restructuring or elimination from adult HPM fellowships, and questions whether training efforts should be redirected towards pediatricians and pediatric subspecialists to fill the void of PPC physicians rather than development of pediatric tracks.

Existential Suffering in Advanced Cancer: The Buffering Effects of Narrative (S732)

Lucille Marchand, MD BSN BS FAAHPM, University of Washington School of Medicine, Seattle, WA.

Objectives
- Describe My Living Story, a narrative, dignity-enhancing intervention for advanced cancer patients.
- Appraise the effects of this intervention on existential wellbeing and psychological distress.

Original Research Background. Dignity-enhancing therapy is a narrative life review intervention shown to improve well-being in hospice and palliative care patients. Our previous pilot study using a modified dignity-enhancing, life-story intervention suggested that pre-hospice, advanced cancer patients could benefit from this intervention. This randomized control trial was designed to test the effects of My Living Story on existential wellbeing and psychological distress in advanced cancer patients. My Living Story included a life review interview, the delivery of the life story, and online cancer information and personalized tools to revise and share the story with loved ones.

Research Objectives.

1. Describe My Living Story, a narrative, dignity-enhancing intervention for advanced cancer patients.
2. Appraise the effects of this intervention on existential wellbeing and psychological distress.

Methods. 117 patients with stage 3 or 4 cancer were recruited from the University of Wisconsin Carbone Cancer Center and randomized 1:1 to My Living Story or to an active control group with access to accurate online cancer resources. Existential wellbeing was assessed with the FACIT-Sp subscales for peace and well-being, and the POMS-SF subscales for anger, depression, anxiety at baseline, 2 and 4 months after intervention. Linear Mixed Model, controlling for pre-test, tested for group comparisons of repeated outcome measures and their subscales at 2 and 4 months.

Results. At four months, the intervention group had a significantly increased greater sense of peace (p=.029) than the active control group. The intervention group had higher scores for existential wellbeing (p=.096) and lower scores for depression (p=.102) than the control group, whose scores worsened while the intervention group maintained or slightly improved.

Conclusion. My Living Story, a modified Dignity-Enhancing Story program, improved advanced cancer patients’ sense of peace and buffered against the worsening depression and existential wellbeing seen in the online cancer information control group.

Implications for Research, Policy or Practice. The dignity-enhancing intervention studied by Chochinov, et al in hospice patients can have wider applicability to other palliative care patients in improving wellbeing and quality of life.

Developing a “Toolkit” for Implementing Early, Concurrent Palliative Care in Community Cancer Centers (S733)

Marie Bakitas, DNSc CRNP AOCN ACHPN FAAN, University of Alabama at Birmingham, Birmingham, AL. James N. Dionne-Odom, PhD RN ACHPN, University of Alabama at Birmingham, Birmingham, AL. Dilip Babu, MD. University of Alabama at Birmingham, Birmingham, AL. Elizabeth Kvale, MD, University of Alabama at Birmingham Center for Palliative and Supportive Care, Birmingham, AL. Lisa Zubkoff,
Objecives

- Gain greater knowledge of the process of how to develop and test a measurement Toolkit for palliative care.
- Gain knowledge of instruments needed to effectively measure implementation of a palliative care intervention.

Original Research Background. Under-resourced community cancer centers (CCCs) are at a disadvantage for implementing early palliative care (EPC) as recommended by national guidelines. As part of an ACS-funded implementation study, we were challenged to evaluate four CCCs’ implementation of the evidence-based ENABLE (Educate, Nurture, Advise, Before Life Ends) EPC model. No EPC-specific implementation measures exist; hence we developed and tested a measurement “Toolkit” to assess implementation at study sites.

Research Objectives. To create and test a measurement “Toolkit” to evaluate pre- and post-ENABLE implementation using the RE-AIM (Reach, Effectiveness, Adoption, Implementation, and Maintenance) framework.

Methods. We undertook a measurement development process within an implementation study at four racially-diverse CCCs in the Southeastern U.S. Following a literature search, expert panel assessment, and site stakeholder input and review, we developed four measures to evaluate RE-AIM dimensions. Newly developed instruments were pilot-tested during initial site visits.

Results. 1) RE-AIM Self-Assessment Tool (13 items) completed by site staff that quantitatively and qualitatively measures EPC program reach, adoption, implementation, and maintenance; 2) the EPC General Organizational Index (interviewer ratings in 12 domains); 3) EPC Implementation costs-sites complete for start-up and on-going program implementation costs; and 4) Oncology Providers Perceptions of EPC (29 items) measures clinicians attitudes about EPC. Patient and caregiver effectiveness is measured by validated quality-of-life, symptom, and mood questionnaires. We will present data on inter-rater reliability and content validity, and sample outcome data.

Conclusion. Implementing EPC is a professional mandate. We have developed and tested and will be disseminating an implementation measures “Toolkit” that is feasible, with preliminary reliability and validity.

Implications for Research, Policy or Practice. Measuring whether program implementation and dissemination has occurred is a critical and developing area of implementation science that necessitates systematic collaboration among key stakeholders: patient, family, clinician, program administrators, and implementation scientists.
before patients had begun any chemotherapy; therefore, any improvements while undertaking aggressive chemotherapy are noteworthy. Participants felt the intervention was acceptable and better than they had expected.

**Implications for Research, Policy or Practice.** Conducting DT/LP in an outpatient oncology chemotherapy setting for newly diagnosed pancreatic cancer patients is both feasible and acceptable. Outcomes are encouraging for future larger scale trials.

**Hospice Caregiver Self-Care: Who’s Caring for the Caregiver? (S735)**

Monica Beck, MSN, University of Alabama Huntsville, Huntsville, AL. Lee Ellington, PhD, University of Utah, Salt Lake City, UT. Catherine Dingley, RN FNP PhD, University of Nevada Las Vegas, Henderson, NV. Margaret Clayton, APRN PhD, University of Utah, Salt Lake City, UT. Maija Reblin, PhD, H. Lee Moffitt Cancer Center, Tampa, FL.

**Objectives**
- Describe five themes related to caregivers’ health and well-being identified during communications with home hospice nurses.
- Discuss the importance of integrating caregiver health/well-being needs into a holistic family-centered approach during home hospice care.

**Original Research Background.** While caregiving burden varies over time, cancer caregivers report lower quality of life and poorer health when providing end-of-life care than during active treatment. Caregiver needs are significant as they affect the quality of caregiving and the likelihood of premature and unnecessary hospital admissions. Yet little is known about the interaction between caregivers and hospice nurses regarding the caregiver’s health and well-being during this crucial time in the cancer care trajectory.

**Research Objectives.** The purpose of this qualitative descriptive study was to explore interactions between caregivers and hospice nurses related to caregivers’ well-being, health, and self-care during in-home visits for advanced cancer patients.

**Methods.** Audio recordings of hospice nurse/caregiver conversations (N=60) were randomly selected from a larger, multi-site study for analysis. 85% of caregivers reported one or more health problems (M=2.5, SD=1.3), yet only half of the visits had communication focused on the caregiver’s well-being, health, or self-care.

**Results.** When discussed, communication related to caregivers focused on the following themes: lack of sleep or rest (caregivers’ and patients’ sleep patterns were intricately intertwined), physical effects of caregiving (other than sleep, such as back strain from lifting), health maintenance issues, emotional/psychological issues (feeling overwhelmed, “muddled and confused,” sharing/balancing family relations and caregiving), and existential issues (bearing witness to family member’s suffering, finding meaning in the role reversal of caregiving, preparing for death/loss).

**Conclusions.** Caregivers experience multiple issues related to their health/well-being that could be addressed during home hospice visits, yet communication is limited.

**Implication for Research, Policy, and Practice.** Little is known about how to facilitate hospice family caregivers’ well-being, health, or self-care. While caregiver distress and psychological effects have been studied, the physical aspects of caregiving have rarely been included. Findings from this study provide the foundation for further research and practice focused on ways to integrate caregivers’ health and self-care needs into a holistic, family-centered approach during hospice care.

**Factors Affecting Post-Acute Referrals for Palliative Home Health Care Among Patients with End-Stage Heart Failure (S736)**

Susan Lowey, RN PhD CHPN, State University of New York College at Brockport, Rochester, NY.

**Objectives**
- Identify three factors that affect referrals for palliative home health care.
- Identify which characteristics of the nurse (demographics, education, nursing experience, personal experience with palliative care) affect referrals for palliative home health care.

**Original Research Background.** Patients with heart failure have the highest rates of hospital readmissions and comprise the largest percentage of home care admissions of any other group. Although palliative care (PC) has been shown to be an effective way to manage distressing symptoms in end-stage heart failure, patients are infrequently referred to PC home care following hospital discharge for an exacerbation.

**Research Objectives.** The purpose of this study was to examine factors that influence the care transitions of end-stage heart failure patients to PC home care.

**Methods.** Focus groups were held with home health discharge nurses to elicit qualitative data used to develop a 45-item quantitative survey. The survey was then randomly distributed to home care nurses across New York state.

**Results.** A total of 112 respondents completed the survey. Two-thirds (69.2%) of the home care agencies offered PC services, while 30.8% only had hospice. 87% of nurses felt they had the ability to refer patients to the home PC team. Nurse age, years of experience, and education were not correlated with a greater number of palliative care referrals, whereas personal
experience with PC was. 91% of nurses indicated a formal protocol for discharge planning.

Conclusion. Patients’ diagnoses were found to be more closely associated with PC referrals than presence of pain/symptoms or declining functional status. 28% of nurses believed patients required a life expectancy of less than 6 months to qualify for PC.

Implications for Research, Policy or Practice. Findings from this cross-sectional pilot study suggest the need to refine discharge planning protocols to better evaluate patients in need of PC prior to home care admission. The transition from the hospital to the home may be an ideal time to refer patients to palliative home care. Patients with end-stage heart failure may benefit from receiving palliative home care by improving symptom management at home which could also decrease hospital readmissions.

Development of Standardized Case Vignettes to Assess Palliative Care Professionals’ Recognition of Delirium, Dementia, and Depression (S737)

Stewart Bond, RN PhD AOCN, Boston College, Chestnut Hill, MA. Sara Keary, PhD MSW, Boston College, Chestnut Hill, MA. Donna Fick, RN PhD, Pennsylvania State University, University Park, PA.

Objectives
- Describe a systematic process used in developing standardized case vignettes of patients with delirium, dementia, and depression in the context of palliative care.
- Examine palliative care professionals’ recognition of delirium, dementia, and depression in patients with advanced life-limiting illnesses.

Original Research Background. Timely and accurate diagnosis of delirium in palliative care is challenging. Palliative care professionals often fail to recognize delirium because of its variable presentation and overlap with other conditions such as dementia and depression.

Research Objectives. To develop and test standardized case vignettes to assess palliative care professionals’ recognition of delirium, dementia, and depression.

Methods. Case vignettes of patients experiencing hyperactive, hypoactive, and mixed delirium; dementia; hyperactive delirium superimposed on dementia (DSD); hypoactive DSD; and depression were drafted and presented to 10 delirium experts who assessed content and construct validity. Revised vignettes were then reviewed by a subset of four experts. Final vignettes were incorporated into a web-based survey and administered to an interdisciplinary panel of palliative care professionals, including physicians (n=8), nurses (n=7), and social workers (n=5).

Results. More than 70% of experts agreed that each vignette had an appropriate level of simplicity. At least 80% agreed that each was very plausible. There was more variation regarding clarity. Correct diagnostic agreement (CDA) among the experts was at least 90% for all but one vignette. In the second review, simplicity and plausibility were rated high, with 100% CDA for all but one vignette. All palliative care professionals correctly identified depression. CDA was 95% for dementia and hyperactive delirium and 90% for hypoactive delirium. CDA was lower for both hyperactive and hypoactive DSD (75%) and mixed delirium (70%).

Conclusion. Overall, palliative care professionals accurately identified depression, dementia, and hyperactive and hypoactive delirium. They were less accurate in identifying mixed delirium and DSD.

Implications for Research, Policy or Practice. Standardized case vignettes provide an innovative approach for studying challenging phenomena such as delirium in palliative care. The vignettes will be used in a larger study examining palliative care professionals’ recognition of delirium, dementia, and depression and in future studies to evaluate the effectiveness of educational interventions.

Cancer Symptom Scale Preferences: Does One Size Fit All? (S738)

David Joyce, PhD, University College Dublin, Dublin, Ireland.

Objectives
- Understand and appreciate how preferences for symptom assessment instruments vary within a cohort of cancer patients.
- Understand the clinical utility of symptom assessment instruments using the observer method.
- Understand the importance of incorporating scale preference into practice of symptom assessment.

Original Research Background. Cancer patients do not report all symptoms readily, so assessment is best done systematically to ensure effective symptom management. The completion rate of some symptom instruments in the seriously ill is less than 50%.

Research Objectives. Subjective symptom experience can be quantified by various scales that include the Categorical Response Scale (CRS), Numerical Rating Scale (NRS), and Visual Analogue Scale (VAS). This study sought to determine patient preferences for CRS, NRS, and VAS in symptom assessment and their clinical utility in three common and important cancer symptoms: pain, tiredness, and loss of appetite.

Methods. A prospective survey was conducted. Consecutive eligible cancer admissions to a 36-bed
Palliative care inpatient unit were invited to participate. Preferences were elicited with regards to three symptom assessment scales. Participants selected their preferred scale for each symptom. We also determined the clinical utility of each scale, defined by ease of completion as judged by an observer. A total of 100 inpatients were recruited.

Results. VAS was the least preferred measure. Scale preference was highly consistent across symptoms. 52% choose the same scale for all three, and 44% for two, with just 4% choosing a different individual scale for all three. There was moderate agreement between participant scale preference and observer-determined ease of scale completion (Pain: K = 0.49; Fatigue: K = 0.45; Appetite loss K = 0.36).

Conclusion. VAS were the least popular. Most participants had a specific scale preference with high intrapatient consistency between the three scales. CRS was preferred for appetite loss and tiredness, but NRS for pain.

Implications for Research, Policy or Practice. Based on these findings, clinicians and researchers involved in cancer symptom assessment should consider individualized use of scales directed by patient preference. As the scale with both the lowest preference score and observed clinical utility, VAS should be used with great caution in this population.

Pilot Findings from Aware Compassionate Communication: An Experiential Provider Training Series (ACCEPTS) for Palliative Care Providers (S739)

Sean O’Mahony, MD MS, Rush University Medical Center, Chicago, IL. James Gerhart, PhD, Rush University Medical Center, Chicago, IL. Ira Abrams, MEd, Shambhala Meditation Center of Chicago, Chicago, IL. Michelle Greene, PhD, Rush University Medical Center, Chicago, IL.

Objectives
- Increase awareness of symptoms of burnout and PTSD in Palliative Medicine Health Care Providers.
- Describe ACCEPTS protocol for enhanced Psychological Flexibility.

Original Research Background. Although many providers enter palliative medicine with the intention of helping others, working in this practice also requires that providers will be repeatedly exposed to the pain, trauma, and death of their patients. These experiences may threaten the values of providers and evoke a range of avoidant coping behaviors that potentiate distress and erode the quality of care provided.

Research Objectives. This manuscript reports pilot findings from Aware Compassionate Communication: An Experiential Provider Training Series (ACCEPTS) for Palliative Care Providers that is derived from principles of Psychological Flexibility Theory.

Methods. Twenty-one providers participated in a group-based 8-week, 10-session training series that emphasized mindfulness and acceptance-based interventions as applied to the needs of those working with the chronically ill and dying. Participants completed measures of distress (i.e. depressive symptoms, burnout) and the PTSD symptom checklist (PCL-C), and they also proposed mechanisms of change identified by Psychological Flexibility Theory (i.e. cognitive fusion and experiential avoidance) at pre-training, mid-training and post-training. Significant reductions in depressive symptoms, depersonalization-burnout, and cognitive fusion were observed.

Results. At baseline, the PCL score was 26, above the at-risk range for PTSD. Participants reported practicing mindfulness on average approximately 139 minutes per week. There were significant improvements in cognitive fusion (p=.025), symptoms of depression (p=.007), and levels of re-experiencing (a symptom of PTSD) (p=.011) and depersonalization (a symptom of Burnout) (p=.001).

Conclusion. Results indicated that ACCEPTS is an acceptable and feasible intervention for providers that may enhance well-being. More research is needed to assess cognitive fusion as a potential mechanism of change in the program.

Implications for Research, Policy or Practice. It could improve workforce resiliency, well-being, and retention.

Loss and Bereavement in Adolescent and Young Adult Oncology Patients (S740)

Liza-Marie Johnson, MDMH MBE, St. Jude Children’s Research Hospital, Memphis, TN. Justin Baker, MD FAAHPM, St. Jude Children’s Hospital, Memphis, TN.

Objectives
- Describe the prevalence of loss in adolescents and young adults (AYA), and list the sources of support used by AYA following loss.
- Summarize the impact of loss on AYA.
- Use the bereavement questionnaire to screen for significant loss.

Original Research Background. Bereavement is the objective situation of losing someone significant through death and the subsequent adjustment that follows. This phenomenon is not well described in adolescent populations, particularly among those with an increased risk of mortality due to a life-threatening illness.

Research Objectives. To quantify the prevalence of loss and describe the bereavement experiences of
adolescent or young adult (AYA) who are also oncology patients.

**Methods.** Cross-sectional survey study of AYA (age 13-21) with diagnosis of malignancy or life-threatening hematologic disorder requiring allogeneic transplant.

**Results.** 153 AYA (95% participation) enrolled in the study. The majority (87.5%) identified at least one loss, and 65% identified the significant loss of a person (n = 100). The most common losses were grandparent (58%), friend (37%), or pet (35%). A diagnosis of leukemia or myeloproliferative or myelodysplastic disease was associated with an increased likelihood of significant loss (p = 0.047). Individuals rating a loss as highly significant were more likely to endorse that the loss changed their life enormously (p < 0.0001) and that recovery was slow or they “never got over it” (p < 0.0001). Even when the loss was rated highly significant, only a minority of AYA discussed the losses often (23%), with the majority speaking about it sometimes (43%) or rarely/never (34%).

**Conclusion.** The majority of AYA will experience loss and often identify the death as significant. AYA are likely to have bereavement experiences that are slow or ongoing, yet they infrequently discuss the loss with others. The impact of loss appears greatest in AYA who endorse significant loss (9 or 10) on a simple 1-10 Likert scale. Use of the Likert scale appears to be a simple screen for identifying significant loss in AYA who are oncology patients.

**Implications for Research, Policy or Practice.** Loss is common in AYA, and their grief and bereavement experiences remain understudied. Evidenced-based research and increased clinical screening are needed in this population.

**The Intensive Palliative Care Unit (IPCU): Changing Outcomes for Hospitalized Cancer Patients in an Academic Medical Center (S741)**

Haipeng Zhang, DO, Dana-Farber Cancer Institute, Boston, MA. Constance Barysauskas, MS, Dana-Farber Cancer Institute, Boston, MA. Charlotta Lindvall, MD PhD, Massachusetts General Hospital, Boston, MA. Elizabeth Rickerson, MD, Dana-Farber Cancer Institute/Brigham & Women’s Hospital, Boston, MA. Kathy Selvaggi, MD MS FAAHPM, Dana-Farber Cancer Institute, Boston, MA.

**Objectives**

- Describe the unique characteristics among oncology patients admitted to the intensive palliative care unit (IPCU) at Dana-Farber Cancer Institute/Brigham and Women’s Hospital.
- Identify three outcomes of a highly specialized intensive palliative care unit.
- Discuss potential benefits of an intensive palliative care unit for cancer patients.

**Original Research Background.** Patients with advanced cancer often require complex symptom management. At Dana-Farber/Brigham and Women’s Cancer Center, the intensive palliative care unit (IPCU) admits oncology patients with uncontrolled symptoms throughout the trajectory of illness. A DNR/DNI is not required for admission. These patients are managed by an interdisciplinary team of palliative care clinicians who focus on symptom management and advanced care planning.

**Research Objectives.** The purpose of our analysis was to investigate goals-of-care outcomes and healthcare utilization after admission to the IPCU.

**Methods.** We retrospectively reviewed patient, diagnosis, IPCU admission, and code status characteristics among 74 oncology patients admitted to the IPCU in August and September, 2013. We examined the distribution of goals of care pre- and post-index IPCU admission.

**Results.** A total of 67 IPCU patients received palliative chemotherapy and/or radiation, while seven patients received curative intent treatment. All patients had documented goals-of-care discussions during the IPCU admission. Of the palliative intent treatment patients, 58% were transferred to the IPCU from medical oncology and 42% were directly admitted. Eighty-seven percent of patients reported pain as the chief complaint, and all patients documented multiple symptoms (median = two). Twenty-five patients (37%) experienced a change in code status from FULL to DNR/DNI. A total of eight patients died in the IPCU, and 50% of these experienced a code status change during the index admission. Eighty-eight percent of patients were discharged alive. Of those, 49% were discharged to home hospice, general inpatient hospice, or an inpatient hospice facility. The risk of 30-day readmission was 4% (95% CI -1%-9%), adjusted for the competing risk of death.

**Conclusion.** Our findings suggest the inpatient palliative care unit helps clarify goals of care, aids in appropriate hospice referrals, and decreases unnecessary hospital readmissions among advanced cancer patients.

**Implications for Research, Policy or Practice.** An IPCU may optimize advance care planning.

**The Caregivers Like Me Telenovela Was Non-Inferior to the Chasing the Tiger Video in Educating Healthcare Professionals About End-of-Life (EOL) Care in Ethnically Diverse Populations (S742)**

Erica Schockett, MD, Saint Louis University School of Medicine, Saint Louis, MO. Dulce Cruz-Oliiver, MD, Saint Louis University, Saint Louis, MO. Theodore Malmstrom, PhD, Saint Louis University, Saint Louis,
Using Measurement Invariance to Validate the Mail and Phone Versions of the Bereaved Family Survey (BFS) (S743)

Mary Ersek, RN FPCN, University of Pennsylvania, Philadelphia, PA. Joshua Thorpe, PhD MPH, University of Pittsburgh School of Pharmacy, Pittsburgh, PA. Dawn Smith, MS, Philadelphia Veterans Administration Medical Center, Philadelphia, PA.

Objectives
- Describe the concept of measurement invariance (MI) and its importance in interpreting and using the results of surveys.
- Discuss the MI for the mail and phone versions of the Bereaved Family Survey.
- Discuss implications of this research vis-a-vis other palliative care surveys.

Original Research Background. The Veterans Health Administration (VHA) evaluates outcomes of end-of-life (EOL) care using the Bereaved Family Survey (BFS). Originally, the BFS was administered as a telephone survey, but it was transitioned to a mail survey beginning October, 2012. The transition necessitated an evaluation of the tool’s validity using this new mode of administration.

Objectives: The objective of this study was to validate the mail version and to test for measurement invariance (MI) across the two administration modes.

Methods. Telephone and mail versions of the BFS were validated separately between October, 2009 and September, 2013. MI was evaluated using a series of confirmatory factor analyses (CFA). Construct validity was evaluated by calculating Cronbach Alpha coefficients and examining differences between BFS Factor scores for groups with and without quality care indicators (e.g., receipt of a palliative care consult).

Results. Our sample consisted of 35,682 decedent BFS scores (27,109 telephone surveys; 8573 mail surveys). BFS-item scores were slightly skewed, with a predominance of higher scores for both the telephone and mail version. The average missing rate for each BFS item was minimal, just 2% for each version. The CFA models demonstrated dimensional, configural, metric, and factor mean invariance across administration modes. BFS factor scores were consistently higher when a patient received EOL quality care indicators regardless of mode of administration.

Conclusions. These findings demonstrate the measurement invariance and robust psychometric properties for the BFS across administration modes.

Implications for Research, Policy or Practice. Accountability is an increasingly important expectation in palliative care, and measuring bereaved families’ experiences of care through validated surveys is a common method for assessing outcomes. Our findings underscore the need to ensure that payers,
regulators, and healthcare systems establish that different modes of survey administration yield similar results. Future research will need to examine the validity and measurement invariance for web-based bereaved family surveys.

**Chronic Pain in the Ambulatory Palliative Care Setting: A Distinct Entity from Acute Pain? (S744)**

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**Objectives**
- Describe the prevalence of acute and chronic pain in an ambulatory palliative care setting.
- Describe the association between acute and chronic pain and outcomes in our ambulatory palliative care setting.

**Original Research Background.** Acute pain is common in ambulatory palliative care (APC), and includes pain related to progression of serious illness and at the end of life. Chronic pain is pain lasting > 3 months, beyond the period of normal tissue healing. It has a unique pathophysiology, and 1 negatively impacts health outcomes. Acute pain management typically involves opioids; treatment of chronic pain often limits opioids and focuses on physical therapy, treatment of comorbid mood disorders, and pain self-management/coping. Distinguishing these groups is important clinically.

**Research Objectives.** To characterize individuals with acute and chronic pain in APC.

**Methods.** Clinical surveillance data from 165 consecutive consenting APC patients between 7/18/2012-5/22/2015 was examined. Chronic pain was defined as average pain on the Brief Pain Inventory (BPI) ≥ 4/10 at least twice > 3 months apart, acute pain as average pain ≥ 4/10 once, and depressive symptoms as PHQ-9 ≥ 10. Multiple regression was used to investigate the cross-sectional relationship between pain category and outcomes (BPI pain interference and depressive symptoms).

**Results.** Among 165 participants, mean age was 52, and 75% were female. Mean number of visits was 2.5. 35% had chronic pain, and 51% had acute pain. Compared to individuals with no pain and after adjusting for age and sex, pain interference was 0.55 points higher on average for individuals with acute pain on a 0 to 10 scale, and it was 1.0 points higher for individuals with chronic pain (p=0.03 and 0.0003 respectively). Odds of depression were 3.7 times higher in acute pain and 4.0 times higher in chronic pain than in individuals without pain.

**Conclusion.** Acute and chronic pain were common and associated with worse outcomes; chronic pain was somewhat more strongly associated with higher levels of pain interference and depression.

**Implications for Research, Policy or Practice.** Additional research is needed to understand differences between acute and chronic pain in this setting.

**Teaching Pediatric Intensive Care Physicians Communication Skills: The Enduring Effects (S745)**


**Objectives**
- Determine feasibility of a communication skills training (CST) to prepare pediatric intensivists for communicating bad news and assessing goals of care in the pediatric intensive care unit (PICU).
- Describe the impact of CST on intensivist skill in communication.

**Original Research Background.** Families of seriously ill children describe unmet needs for honest information presented empathetically, while intensivists report inadequate training in having difficult conversations.

**Research Objectives.** 1. To determine feasibility of communication skills training (CST) to prepare pediatric intensivists for communicating bad news and assessing goals of care in the pediatric intensive care unit (PICU). 2. To describe the impact of CST on intensivist skill in communication.

**Methods.** Intensivists volunteered to undergo CST with didactics, discussions with simulated parents, and a videotaped OSCE exam. Surveys prior to the intervention and one month after were tabulated for descriptive statistics. Wilcoxon signed-rank tests compared outcomes at 2 time points. 2 independent trained reviewers scored the OSCE using a validated tool.

**Results.** Twelve participants completed training. In the post-CST survey, all participants agreed the
training gave them skills to communicate in challenging situations, and they would recommend it to peers. When comparing pre- and post-CST self-assessment measures of intensivists’ information-seeking from families, there was a significant increase 1 month after training (p=0.03), with intensivists more likely to ask what kinds of information families need and what their understanding of their child’s disease is, but no significant changes in information seeking or giving, which was not covered in the training. Finally, 11 of the 12 intensivists received passing scores on the OSCE as measured by a validated tool, with the average score being 48.5 (SD 5.92) compared to 38.6 (SD 9.93) after training that was reported in the literature.

**Conclusion.** This study provides evidence that intensivists are willing to participate in CST and an OSCE exam, and they find it worthwhile. There is also evidence that they perceive an improvement in their skill set as a result of having participated.

**Implications for Research, Policy or Practice.** Offering realistic, simulation-based CST is feasible and effective for training intensivists.

**Embedding Palliative Care into Bone Marrow Transplantation Clinic (S746)**

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**Objectives**
- Discuss the symptom burden present in a bone marrow transplant clinic population.
- Describe the structure and benefit of palliative care multidisciplinary intervention in a bone marrow transplant patient population.

**Original Research Background.** Stem cell/bone marrow transplantation (SC/BMT) is intensive therapy that creates the potential for a number of physical and emotional symptoms; despite this there are no publications describing palliative care involvement in the course of treatment.

**Research Objectives.** We studied the impact of palliative care interdisciplinary care on symptom management within a bone marrow transplant clinic.

**Methods.** Retrospective chart review was performed on 37 patients followed over a 6-month period by a palliative care service embedded within the SC/BMT clinic.

**Results.** 37 patients were referred by SC/BMT clinic physicians or nurses to a palliative care team embedded within the clinic (including a physician, physical therapist, and psychologist). Almost all patients were referred for symptom management rather than goals of care; only three (9%) died during the review period, and for none of them was the reason for consultation goals-of-care/hospice referral. Most (77%) were allogenic transplant patients, and most were seen within 6 months of their transplantation. The most common reasons for referral were fatigue (57%), anorexia (27%), pain (38%), and depression and/or anxiety (35%). At initial assessment, the highest-rated symptoms were lack of appetite (mean 4.78, SD 3.08), fatigue (4.51 [2.59]), and diminished feeling of well-being (4.16, [2.51]). At initial assessment, 73% of patients had three or more different symptoms that they rated at 4+; this dropped to 39.1% at follow-up (n=23). Of the nine symptoms assessed at both initial and follow-up visits, seven decreased significantly (all but fatigue and dyspnea) and none increased. For example, appetite improved from 5.52 (2.98) to 3.13 (2.96) and pain improved from 3.52 (2.92) to 1.78 (1.88) (n=23, p<.01).

**Conclusion.** Palliative care embedded within the bone marrow transplant clinic can provide benefit by lessening the symptomatic burden of patients.

**Implications for Research, Policy or Practice.** Further study can help define patients in a bone marrow transplantation setting who would benefit from palliative care management.

**Considering Care: A Descriptive Study of Moral Distress (S747)**

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**Objectives**
- Understand the concept of moral distress in health care professionals and be able to identify two potential contributing factors and two potential consequences of moral distress.
- Identify two strategies or types of interventions that a palliative care team and others can use in a hospital or other healthcare settings to mitigate moral distress and improve staff morale.

**Original Research Background.** Moral distress involves stressful situations in which moral values are challenged. As patient acuity rises, staff will likely face more situations presenting ethical dilemmas that may result in moral distress. Our academic medical center serves a multicultural community that includes a large population of a minority, faith-based group, which influences decisions to utilize life-sustaining therapy (LST). Patients on the respiratory care unit (RCU) have a mean age of 82, have chronic ventilator-dependent respiratory failure, and often utilize additional LST (tube feeding, dialysis, vasopressors). Faith-based minority patients are disproportionately high on this unit.
**Research Objectives.** To understand the experience of moral distress and factors contributing to, and resulting from, that distress. The research explored current coping strategies and possible interventions to address identified issues.

**Methods.** A descriptive, qualitative design was used, with convenience purposive sampling. IRB approval was obtained. All RCU nurses were invited to participate. Participants provided demographic information and took part in semi-structured focus groups. Transcriptions of audio recordings of the focus groups were analyzed to identify themes.

**Results.** Moral distress was evident in staff and manifested in many ways. Contributing factors included communication issues, difficulty working with families, differences in values related to culture, and aggressiveness of medical treatment. Consequences included themes of emotional and behavioral responses (depersonalization, desensitization, disempowerment). Demographic differences between day and night staff suggested different interventions needed. Staff offered recommendations, some of which have been implemented, and they demonstrate early positive impact on staff engagement and morale. These include ethics rounds, support sessions, and an ELNEC education day.

**Conclusion.** Our findings indicate an urgent need to recognize and address moral distress in staff. Staff satisfaction has important implications for optimal relationship-based care as well as staff retention.

**Implications for Research, Policy or Practice.** Further research evaluating interventions are needed. Palliative care teams and bioethics consultation can be instrumental in providing staff education and support.

**“When I Heard Palliative Care, I Heard Hospice”: Parents’ Experiences With Pediatric Palliative Care Consultation in the Neonatal Intensive Care Unit (S748)**

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**Objectives**
- Describe the role of pediatric palliative care consultation in the neonatal intensive care unit (NICU) setting.
- Describe parent experiences with a pediatric palliative care consultation in the NICU and implications for practice and further research efforts.

**Background.** In 2013, 23,440 infants died in the US; most deaths occurred in the first 28 days of life. Pediatric palliative care consultation (PPC) in the neonatal intensive care unit (NICU) may provide much needed support for these infants and parents. Early in the critical illness trajectory, PPC may assist with parental decision-making. However, there is a paucity of research on parental perceptions of PPC and why these services may be underused in the NICU until death is imminent.

**Research Objectives.** To describe parents’ experiences with a PPC prior to their infant’s death in the NICU.

**Methods.** In this descriptive qualitative study, we conducted individual audio-recorded, semi-structured interviews with a convenience sample of parents (N=10) from a children’s hospital in the Southeastern US approximately four years after infant death. Upon reaching thematic saturation, verbatim transcribed interviews were verified for accuracy, coded, and content analyzed using qualitative descriptive methods. We used member-checking to enhance trustworthiness of the findings.

**Results.** Six of 10 parents had formal PPC. Most PPC occurred near the end of life, and parents’ reported “negative connotations” associated with the consult initially, such as losing hope of curative treatment. However, all parents who received PPC would recommend this service to other parents and found PPC as a helpful layer of support. Specific positive experiences included: feeling like they had an extra advocate, a non-judgmental sounding board, and “another support branch.”

**Conclusions.** PPC is often not considered until very near death, and parents’ identified PPC as a marker of transition from curative to end-of-life care. Nevertheless, parents found PPC to be valuable and would recommend it to other parents.

**Implications for Research, Policy or Practice.** Further research is necessary to understand the factors that influence parental perceptions of PPC and how to identify opportunities for earlier PPC integration in the NICU.

**Hearing Loss in Hospice and Palliative Care: A National Survey of Providers (S749)**

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**Objectives**
- Understand hospice and palliative medicine provider perspectives on the impact of hearing loss
on communication in the older adult patients they care for.

- Understand that rates of formal training and knowledge about hearing loss management is low.

**Original Research Background.** Age-related hearing loss can impair patient-provider communication about symptom management, goals of care, and end-of-life decision making.

**Research Objectives.** To determine whether hospice and palliative care providers screen for or received training about hearing loss, believe it impacts patient care, and use strategies to optimize communication.

**Methods.** National survey of hospice and palliative care providers. Survey questions were pilot-tested with multi-disciplinary providers in San Francisco. We solicited responses via emails to professional contacts and AAHPM members, the GeriPal blog, twitter, and Facebook. Responses were collected using an online survey tool.

**Results.** Of 510 responses (55% age 50+, 65% female, 63% in practice 5+ years, 55% practice primarily in inpatient/outpatient palliative care, 45% in hospice), 315 were physicians, 50 nurses, 48 NPs, 58 social workers, and 39 chaplains. Ninety-one percent reported that hearing loss has some or great impact on the quality of care for older adults. Eighty-eight percent recalled a specific instance of hearing loss impairing communication with a patient, and 56% remembered it impairing communication with a caregiver. Eighty-seven percent of physicians, nurses, and NPs reported not screening for hearing loss. While 62% felt comfortable with their communication skills for patients with hearing loss, only 21% reported receiving formal training in its management, 31% were unfamiliar with resources for patients with hearing loss, and 38% had never heard of a pocket talker amplification device.

**Conclusion.** Hospice and palliative medicine providers believe age-related hearing loss impacts care, yet most do not screen. While they feel they are managing well, few have formal training, and knowledge about management approaches and resources is sub-optimal.

**Implications for Research, Policy or Practice.** The lack of research in this area is glaring relative to its importance. Universal screening should be considered. Training in management strategies is needed.

**Healing the Heart: Feasibility of a “High-Touch” Model of a Community-Based Palliative Care Program for Patients with Advanced Heart Failure (S750)**

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**Objectives**

- Describe an innovative interdisciplinary, community-based palliative care program targeting heart failure patients with high healthcare utilization costs.
- Discuss preliminary outcomes of a community-based palliative care team in securing advance directives and hospitalizations/ED visits in a heart failure cohort.

**Original Research Background.** Studies are needed to evaluate varied models of community-based palliative care. Patients with advanced heart failure have high morbidity and healthcare utilization, and interdisciplinary “high-touch” models may best address their needs.

**Research Objectives.** To evaluate feasibility of a “high-touch” palliative care model for advanced heart failure.

**Methods.** We conducted a retrospective cohort analysis of a pilot in which 20 patients (NYHA class III or IV, PPS score ≥70, ≥2 hospitalizations per 6 months) were offered at least-monthly visits by an MD/NP, social worker visits, at least-weekly calls by an RN specialist, and access to 24-hour on-call. Patients incurred no cost and had interventions that included symptom management, advance care planning, weight monitoring, education about nutrition and medication, and hospice eligibility review. Data entered into an electronic medical record were extracted for this analysis.

**Results.** Of the 20 patients referred between June and December, 2014, six refused and 14 were enrolled. Mean age was 73.1 years (range 49–90), 85.7% were NYHA Class III, and 85.7% had PPS scores of 60 or 70. During 6 months of care, patients averaged 3.6 (SD = 1.4) MD/NP visits, 2.9 (SD = 1.6) social work visits, and 19.8 (SD = 9.9) RN calls. On-call visits averaged 1.4 (SD = 1.8). During treatment, mean hospitalizations were 1.3 (SD = 1.5), ED visits were 0.4 (SD = 0.5), and one patient elected hospice. All completed a healthcare proxy; additional data regarding symptoms and satisfaction is being collected.

**Conclusion.** Feasibility of this “high-touch” model of community-based palliative care in the population with advanced heart failure is supported by acceptance of the program by almost three-quarters of those referred, no drop-outs after care started, and a very high use of services.

**Implications for Research, Policy or Practice.** Larger studies are needed to evaluate the clinical and economic outcomes produced by varied models of community-based palliative care in populations with heart failure.
Association of Cancer-Related Fatigue with Other Symptoms and Impact on Quality of Life of Palliative Care Patients in a Tertiary Cancer Institute: A Prospective Observational Study (S751)

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Objectives

- Determine the correlation of factors associated with severity of fatigue and quality of life in advanced cancer patients.
- Predictors of improvement in fatigue at first follow-up visit.

Original Research Background. Fatigue, along with other symptoms, affects quality of life (QOL) in advanced cancer patients. The relative importance of it is not known in the Indian population.

Research Objectives. 1. To determine the correlation of factors associated with severity of fatigue in advanced cancer patients. 2. To determine whether the severity of fatigue has any impact on the quality-of-life domain. 3. To determine predictors of improvement in fatigue at first follow-up visit.

Methods. A prospective, observational study was conducted in the outpatient clinic from January to June, 2014. Registered adult advanced cancer patients meeting the inclusion criteria (ECOG/1) were assessed after taking informed consent for symptom burden (ESAS) and QOL (EORTC-QOL PAL15) along with demographic details. They were given standard treatment for those symptoms. They met the team or were telephonically contacted for the same after an interval of 15 to 30 days. Descriptive statistics, comparison of baseline and follow up data, correlation and multiple linear regressions between fatigue and symptoms at baseline, logistic regression model to determine factors associated with improvement in fatigue were performed.

Results. A total of 402 subjects were assessed at baseline and follow up (median age, 52 years; 51.6% male). Significant change in fatigue score was observed (p<0.001) at follow up. Hemoglobin, albumin levels, type of cancer, sites of metastasis, ECOG score, body weight, ESAS items except drowsiness, overall QOL, emotional functioning, and constipation were found to be significantly associated with fatigue at baseline (p < 0.05). The logistic regression model showed that changes in hemoglobin and albumin levels, pain, dyspnea, physical functioning, and insomnia on QOL scale significantly contribute to the improvement in fatigue.

Conclusion. Fatigue is strongly associated with certain physical, emotional and biochemical parameters, some of which are predictive of improvement of fatigue.

Implications for Research, Policy or Practice. It is a single-center study, so generalizability needs to be ascertained.

Implementing an Evidence-Based Tool for Assessing Pain in Non-Communicative Palliative Care Patients: Challenges And Solutions (S752)

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Objectives

- Identify challenges and solutions to implementation of a tool for assessing acute pain in non-communicative adult patients in a clinical setting.
- Evaluate MOPAT use over time.

Original Research Background. Adult non-communicative patients with acute pain are at high risk for under-treatment due to inaccurate assessment. Consistent use of a reliable, valid, clinically useful pain assessment tool improves assessment, but there is little information about facilitating clinical implementation of evidence-based tools in this population.

Research Objectives. Identify challenges and solutions to implementation of a tool for assessing acute pain in non-communicative adult patients in a clinical setting. Evaluate Multidimensional Objective Pain Assessment Tool (MOPAT) use over time.

Methods. At a hospital in which most nursing documentation was performed on paper, the MOPAT was built into the electronic health record (EHR) to facilitate data retrieval for a funded study. Leadership selected unit-based nurse champions to facilitate implementation. Data abstracted from the EHR were used to develop weekly compliance audits and were shared with the champions, along with e-mails that included screen shots and documentation requirements. MOPAT compliance fluctuated and was insufficient, so nurse champions suggested daily feedback and bedside documentation reminders. Some units used additional strategies, such as bedside demonstrations.

Results. The unit that used bedside demonstrations was the first high-accruing unit to reach the 90% compliance target. Across all participating units,
week weekly compliance fluctuated between 79% and 92% for the first 11 weeks, with only 3 intermittently dispersed weeks at or above 90%. Individual daily feedback resulted in an 89 to 97% completion rate sustained for at least 7 weeks.

Conclusion. Multimodal strategies were needed to integrate an evidence-based pain tool for adult non-communicative patients into practice. Utilizing unit-based champions was an important strategy that facilitated implementation, including recommending strategies to boost compliance and usage.

Implications for Research, Policy or Practice. Unit-based champions and feedback are important strategies for clinical implementation of evidence-based pain tools in patients who cannot self-report. Supported by NINR 5R013664.

Implementing Primary Palliative Care Intervention in Transitional Care Practice: Feasibility, Barriers, and Facilitators (S753)
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Objectives
• Describe feasibility, barriers, and facilitators to implement a new intervention into practice.
• Discuss strategies to close the research-practice gap in context of palliative care intervention.

Original Research Background. While development of effective interventions to improve care quality and health outcomes is an urgent healthcare issue, gaps exist between potentially effective intervention and its implementation in practice. Careful examination of feasibility and identification of variables that facilitate or hinder implementation is a key to close the gap.

Research Objectives. We conducted a formative evaluation study to assess feasibility and implementation barriers and facilitators of a newly developed intervention integrating primary palliative care in transitional care for older adults with chronic conditions.

Methods. The Transitional Palliative Care (TPC) intervention involved a home visit by a nurse and health coach and 3 months of telephone follow-up focusing on symptom management and advance care planning. We enrolled 20 older adults discharged from hospital to home in the intervention group to assess intervention feasibility. At the end of the intervention, all participating patients, two intervention nurses and seven health coaches were interviewed. Data were analyzed using qualitative content analysis.

Results. Four participants withdrew because they perceived the intervention was either burdensome (n=2) or not needed (n=2). Another participant had a hospital readmission during study period and did not complete the study. Patients who completed the study found the intervention helpful. However, the components of care perceived as most or least helpful varied among participants. Interventionists said the major challenge was complexity and diversity of patient needs. To respond to the complex and diverse needs, being flexible and resourceful, having good communication skills to work with various team members, and having clinician champions who advocate for the TPC nurse facilitated the intervention.

Conclusion. To be successful implementing an intervention in practice, the intervention and interventionists need to be well situated in the practice, knowing resources and collaborators and having support from champions.

Implications for Research, Policy or Practice. It is critical to tailor the intervention fit to the setting while identifying the essential components of the intervention that are generalizable to other settings.

A Review of Claims-Based Quality Measures Used by the Centers for Medicare and Medicaid Services (CMS) and Medicare Administrative Contractors (MACs) to Monitor the Medicare Hospice Benefit (S754)
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Objectives
• Describe measures that CMS and MACs use to monitor hospices participating in the Medicare Hospice Benefit.
• Compare characteristics of hospices that are outliers along the five measures to the overall characteristics of all hospices that participate in the Medicare Hospice Benefit.

Original Research Background. As part of the Medicare Hospice Benefit (MHB), hospices submit claims containing information that allows policy makers to identify outcomes with large variation across hospices. Identifying outliers that have poor outcomes can help policy makers improve the MHB and increase the quality of care being provided.

Research Objectives. Identify hospices that are outliers in the provision of hospice services along five
Quality measures are calculated using 100% of Medicare hospice claims from January 1, 2010 through January 31, 2013. For each measure, hospices are grouped into deciles. An overall count of how many times a hospice appears in the eighth decile or higher is made to determine which hospices are outliers.

Results. There are 14 hospices that are in the highest three deciles for the first three measures and the lowest three deciles for the last two measures. 226 hospices are in the worst three deciles for at least four measures. The majority of those hospices (70.8%) are located in the south census region, and 80.4% are for-profit providers. The average spending per beneficiary for those hospices is $25,518, compared to $14,977 per beneficiary for all hospices.

Conclusion. Using this data, CMS and MACs can identify hospices that are outliers for a given measure. Not all outliers indicate a serious problem, however if a hospice is an outlier for several measures, it may indicate questionable practices and a need for closer inspection by CMS and MAC.

Implications for Research, Policy or Practice. Hospices should monitor their outcomes along the measures discussed to understand how they perform compared to their peers.

Surgery Without a Surrogate: The Low Prevalence of Healthcare Power of Attorney Documents Among Pre-Operative Patients Requiring General Anesthesia (S755)

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Objectives
- Establish the importance of identifying a healthcare power of attorney (HCPOA) agent prior to surgery requiring general anesthesia.
- Quantify the prevalence of HCPOA documents implemented into the EMR prior to surgery requiring general anesthesia.

Original Research Background. Surgery requiring general anesthesia is associated with significant morbidity and mortality. This often creates pre-operative psychological distress for patients and families. While there has been considerable research and effort to improve risk stratification of medical conditions prior to surgery, there has been little research and few documented quality improvement efforts regarding the appropriate implementation of Health Care Power of Attorney (HCPOA) documents into the electronic medical record (EMR) prior to surgery, even though studies have shown a correlation between an advanced care planning and patient autonomy and quality of life.

Research Objectives. (a) Investigate the prevalence of HCPOA documents incorporated into the EMR of patients undergoing elective surgery and requiring general anesthesia at four different health care institutions with well-established palliative care and advance care planning programs. (b) Investigate correlations between HCPOA documents and age, sex, marital status, American Society of Anesthesiologists Physical Status classification system (ASA), insurance coverage, body mass index, and zip code of patient’s residence.

Methods. We performed a retrospective chart review of the first 500 consecutive adult patients (18 years or older) undergoing elective surgery that required general anesthesia between the dates of January 1, 2012 to December 31, 2012 at one of four medical centers with well-established EMR systems as well as regional reputations for advance care planning and palliative care. We excluded patients undergoing emergent surgeries and a court appointed guardian. Patient information was de-identified after demographic information and HCPOA information were collected. A descriptive analysis and logistic regression analysis were performed to examine associations.

Results. Of 1723 charts reviewed, only 382 had a HCPOA document implemented into the EMR at the time of surgery requiring general anesthesia. Twelve of the subjects reviewed were physicians, and only three of the physicians had a HCPOA implemented into the EMR at the time of surgery. The odds of having HCPOA implemented into the EMR were significantly higher with age, female gender, and higher ASA scores. There was no evidence that body mass index, insurance type, and socioeconomic status based on zip code group correlated with the rate of HCPOA documents. There was significant variability between healthcare institutions, and the odds of having a HCPOA implemented in the EMR were significantly lower for widows.

Conclusion. Less than a quarter of patients undergoing a surgery requiring general anesthesia have a HCPOA document implemented into the EMR despite the known associated morbidity and mortality risks. The presence of EMR systems, well established palliative care programs, and advance care planning advocacy taskforces appear to be insufficient to ensure that clinicians have appropriate documentation of a surrogate prior to a planned surgery.

Implications for Research, Policy or Practice. Further research and quality improvement
initiatives are needed to identify how HCPOAs can be better identified prior to surgeries and medical interventions. The low prevalence identified in this study represents a significant patient safety concern.

Milestones for the Final Mile: Interspecialty Distinctions in Primary Palliative Care Skills Training (S756)
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Objectives
- Articulate the importance of primary palliative care skills for all residents in training.
- Identify examples of directly salient and indirectly salient milestones within different specialty milestone documents.
- Apply knowledge gained from this research to hospice and palliative medicine policy changes at local and national levels.

Original Research Background. Many physicians do not receive training in primary palliative care skills (PPCS). The Accreditation Council for Graduate Medical Education (ACGME) and specialty boards recently created milestone documents to improve the quality of graduate medical education. It is unclear to what extent these residency evaluation milestones consistently address PPCS.

Research Objectives. To characterize the variation and quality of PPCS in residency outcomes-based milestones.

Methods. We performed a content analysis with structured implicit review of 2015 ACGME milestone documents from fourteen medical and surgical specialties. For each milestone document, we identified the total count of milestones directly and indirectly salient to PPCS, the total count of pain management-relevant milestones, the frequency of milestones by ACGME core competencies, and the average developmental progression level of salient milestones in each specialty milestone document.

Results. 959 occurrences of 29 palliative search terms were identified. Implicit review characterized 104 milestones with direct saliency to PPCS and 196 milestones with indirect saliency. Inter-rater agreement of the saliency rating was 89%. Palliative care milestones were most commonly found in milestone documents for Anesthesiology, Pediatrics, Urology, and Physical Medicine and Rehabilitation. PPCS-relevant milestones were most commonly found in the Interpersonal and Communication Skills core competency, with 108 (36%) relevant milestones identified.

Conclusion. Future revisions of specialty-specific milestone documents should focus on currently under-represented, but important PPCS.

Implications for Research, Policy or Practice. The Palliative Care and Hospice Education and Training Act was recently re-introduced before Congress. It proposes to commit significant federal resources to improve palliative care education. With an aging population and anticipated shortage of physicians with formal palliative care training, knowledge of PPCS among all physicians will become increasingly important. Systematic incorporation of PPCS into the milestone documents is one potential step towards ensuring current residents receive basic training in symptom management and communication skills.

Carrot or Stick? Mandatory Versus Optional Fields for Capturing Palliative Care Quality Metrics in an Electronic Medical Record (S757)
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Objectives
- Describe a method of documenting JCAHO palliative care quality metrics in an electronic medical record.
- Evaluate the potential impact of making palliative care quality metric documentation fields required versus optional in an electronic clinical note.

Original Research Background. To improve documentation of quality metrics, a multidisciplinary team of clinicians designed new documentation templates to capture information on dyspnea, nausea, bowel regimens when opioids prescribed, identity of the legal decision maker, and initiation of spiritual support.

Research Objectives. To determine what proportion of initial inpatient palliative care (PC) consults included quality metric data when the note fields were mandatory versus optional in three southeastern academic hospitals.

Methods. We compared the documentation percentages from January to April (mandatory fields) with June and July 2015 (optional fields). Dyspnea and nausea screens were a “Yes/No/Unable to assess” question. The note asked whether opioids were initiated or continued (yes or no) and about relevant bowel regimens. Name and phone number of the legal surrogate decision maker were entered in free text fields. Spiritual support offerings were recorded as “Yes/Declined/Deferred.”
Results. There were 1428 initial consults and 2636 follow-up visits during the “mandatory period” and 576 and 1340 during the “optional period.” Documentation rates were 100% when mandatory. During the optional period, the documentation rates were: dyspnea screen, 82%; nausea screen, 73%; offers of spiritual support, 80%; and surrogate name and phone documentation 89% and 80%, respectively. Opioid use was documented in 59% of initial consults when optional; clinicians reported positive opioid use in 45% of consults when mandatory but only 29% when optional. Dyspnea and nausea were “unable to be assessed” in ~30% of mandatory versus ~20% of optional consults. 5% of mandatory phone numbers were invalid entries just done to complete the note.

Conclusion. Although the note was built with multidisciplinary clinician input to optimize workflow, some objected to the additional mandatory fields. Making these optional reduced documentation by ~10-30%.

Implications for Research, Policy or Practice. Though potentially cumbersome, making quality data fields optional results in a substantial drop in the amount of quality data recorded.

Artists’ Perspectives on Encounters with Palliative Inpatients, a Qualitative Study (S758)
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Objectives
- Discuss non-pharmacological, multidisciplinary interventions appropriate for palliative medicine patients.
- Learn overarching themes discovered through artists’ reflections.

Background. In January, 2015, our Palliative Medicine Program teamed up with our cancer center’s Arts and Humanities Program to send artists to perform for palliative inpatients at bedside. Current literature supports the positive impact of music and art on patients with chronic illnesses. However, the encounter between artist and patient is not just one-directional; it is a rich interaction where both individuals are affected. After each encounter with our palliative patients, artists wrote down their thoughts to encourage self-reflection and self-care. This qualitative study examined artists’ reflections and uncovered common themes of these therapeutic interactions.

Research Objectives. To identify overarching themes/outcomes/impacts of the Arts and Humanities program at Georgetown University on artists and patients from the palliative medicine service.

Methods. We performed a retrospective record review of artists’ reflections on their patient interactions. We conducted a qualitative review of 50 existing journal entries. Two reviewers initially analyzed seven entries and extracted pertinent themes. Reviewers discussed and revised themes. Reviewers examined reflections from practitioners across multiple disciplines, including a cellist, a singer, a violinist, a harpist, a fabric artist, an expressive writer, and a dancer.

Results. Initial themes that emerged included impact of the arts and humanities program on patients’ physical well-being, emotional well-being and social well-being; impact on the artists’ included elements of emotional and social well-being. Physical well-being was documented as artists’ reported observations of both non-verbal and verbal patients. Among non-verbal patients, artist reported that the arts activity appeared to trigger patients’ relaxation of the facial muscles, smiling and humming. Among verbal patients, artists reported patients’ emotional well-being improved by noting an increased sense of peace and strength. Further, among verbal-patients, social well-being changes were noted as both inter-personal and intra-familial level of engagement. Specifically, interpersonal connections were observed among patients who sought connection with the artists by inquiring about the artists’ craft/trade and personal stories. Intra-familial engagement was also reported among younger patients who were observed to engage in arts activities with their parents and other family members.

Conclusion. Through the course of our analysis of these reflections, it is clear that our program has had a meaningful impact not only for our patients, but has also had a true influence on the artists.

Implications for Research, Policy or Practice. This study has wide application in further research and practice. Firstly, this qualitative study lends itself to a quantitative symptom assessment with respect to the Arts and Humanities program. Further research could be done looking at pre- and post-interactions on symptoms as well. Finally, this study provides observations to the palliative medicine community about the impact of this program on patient’s physical, emotional and social well-being, as well as the artist’s, which is an interesting addition to the literature on humanities-based interventions in palliative medicine.
Decision Making Process of Parents with Seriously Ill Children at the Hospital (S759)
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Objectives
- Identify the core category for parents of a seriously ill child about the decision making process at the hospital.
- Identify parents’ preferences when they have to make a decision on behalf of their seriously ill child.

Original Research Background. Changes related to the decision making of parents of seriously ill children at the hospital have been reported in the literature, emphasizing the active role of parents and professionals in sharing information. Professionals are unprepared to deal with the dying process, and parental involvement in decisions is important for the care and future of the family.

Research Objectives. This study aimed to understand the experience of parents of seriously ill children regarding the decision-making process in the hospital.

Methods. This is a qualitative study using Symbolic Interactionism and Grounded Theory as theoretical and methodological framework. Data collection was performed in a pediatric hospital in São Paulo, through active observation, hospital records and semi-structured interviews with 10 parents who had their children hospitalized with a life-threatening condition during the data collection period. The interviews were recorded and transcribed. Data was analyzed following the procedures of the Grounded Theory.

Results. After the theoretical saturation had been reached, it was possible to propose a theoretical model to explain the decision-making process of parents by the core category: Being good for my child is being good to me, and the following categories: being scary, recognizing that everything is being done for the child, needing information, deciding about the participation in decision-making, having faith and hope, and valuing a relationship of trust with health providers.

Conclusion. The results indicate that parents’ experience in decision-making is related to individual preferences and the relationship with the healthcare team, which allow them to trust some decisions to physicians and to play an active role as their children’s advocates.

Implications for Research, Policy or Practice. Ensuring family care, from what parents consider good for their child, allows nurses to guarantee the active role of parents in the decision-making process.

Challenges of Providing End-of-Life Care for Homeless Veterans (S760)
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Objectives
- Explain quantitative and qualitative aspects of the challenge of caring for homeless Veterans who are approaching the end of their life.
- Describe the challenges that are frequently encountered in caring for homeless Veterans who are approaching the end of their life.
- Discuss and categorize potential solutions to the challenges of care for homeless Veterans at the end of their life.

Original Research Background. More than 76,000 Veterans are estimated to be homeless on any night. Among the homeless, mean age at death is 34-47 years. Veterans who are both homeless and at the end of life (EOL) do not fit readily into programs for homeless Veterans (HV) or those at end of life.

Research Objectives. (1) Describe current services and perceived challenges of caring for HV at EOL by surveying existing Veterans Administration (VA), homeless Veterans, and end-of-life programs. (2) Develop a deep and broad understanding of the issues, barriers and facilitators to excellent EOL care for HV. (3) Define the key structural, clinical and policy elements required to deliver excellent care to HV at EOL.

Methods. Using a mixed-methods sequential design, VA homeless and EOL programs were surveyed. Key informant interviews and focus groups with HV, multidisciplinary providers, and community and VA leadership were conducted at four geographically dispersed VA facilities. A National Program and Policy Development Forum is addressing the challenges uncovered.

Results. Interviewees and focus group participants emphasized: (1) While declining health of HV prevents independent living or realistic plans to abstain, housing options are too often limited to places that insist on functional independence and sobriety. (2) Pain management within the context of addiction, unstable housing, and behavioral health problems are challenging. (3) Discontinuities within and between systems restricts care delivery. (4) VA regulations
pose significant challenges to collaboration with community providers. (5) Care providers for HV at EOL must compete for attention and resources with other pressing challenges within VA.

**Conclusion.** Lack of housing suited to HV with rapidly declining health and isolation of homeless and EOL providers from each other are among the most pressing challenges.

**Implications for Research, Policy or Practice.** The Forum is developing proposals to facilitate already functioning, informal collaborations among HV and EOL care providers, maximize VA-community partnerships, and expand peer support services by formerly homeless Veterans.

**Feasibility of Outpatient Advance Care Planning Discussions: Adventures of a Primary Care Physician (S761)**

Molly Collins, MD, Massachusetts General Hospital, Boston, MA. Daniel Horton, MD MSCE, Rutgers Biomedical and Health Sciences, New Brunswick, NJ. Brooke Worster, MD, Jefferson University Hospital, Philadelphia, PA.

**Objectives**
- List at least three patient factors associated with an increased likelihood of having advance care planning discussions.
- State one new way that advance care planning may be integrated into routine primary care.

**Original Research Background.** Although primary care providers are well poised to initiate and conduct advance care planning discussions (ACP), we know little about the feasibility of integrating ACP into routine primary care outside of QI settings.

**Research Objectives.** We aimed to determine the scope of and factors related to ACP for one primary care provider's patients.

**Methods.** We performed a chart review of all patients on a primary care provider’s panel (MEC) between 2012 and 2015. We evaluated clinical and systems factors associated with ACP using multivariable logistic regression.

**Results.** Among 1074 patients on the panel, 68 (6%) had documented ACP. Those with ACP included 41% of patients ≥65, 60% of patients whose deaths would have been unsurprising in the next year, and six of seven patients who died. During sessions when ACP took place, there was no difference in clinic patient volume compared to the provider’s average in the same year. Although 25% of those with ACP had established written wishes, few (n=3) subsequently brought in advance directives; few others (n=3) completed new advance directives. Healthcare representatives (named in 84% of ACP) were also commonly the next of kin (79%) or listed emergency contact (83%). Factors independently associated with ACP were older age, number of clinic visits, active cancer diagnosis, and patients whose death would be unsurprising. Interestingly, among patients ≥65 without serious illness, each additional non-life-threatening comorbidity reduced the likelihood of ACP by 44%.

**Conclusion.** Targeting ACP to older and seriously ill patients is feasible in a busy primary care practice. Medical complexity may be a deterrent to having ACP with patients without life-threatening illness.

**Implications for Research, Policy or Practice.** We should prioritize conversations in ACP rather than completion of advance directives. Listed emergency contacts could provide a gateway for establishing healthcare representatives. New proposed payment models may help facilitate additional discussions for all patients.

**A Survey and Qualitative Interview of Parisian Palliative Care Professionals’ Views of End of Life, Death, and Dying (S762)**

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**Objectives**
- Compare the organization of the palliative care systems in France and the United States.
- Articulate the purpose and significance of the Templer Death Anxiety Scale.
- Interpret the difference between a score of 0 and a score of 15 on the Templer Death Anxiety Scale.

**Original Research Background.** Among the 191 countries whose healthcare systems were evaluated by the WHO in 2000, France ranked first overall. Also, as the first country to start hospice, France has been instrumental in the promotion and spread of hospice and palliative care (PC). The current researchers wished to explore French PC professionals’ views on end of life; it is hypothesized that these views may be influenced by and in turn influence patient-provider interaction.

**Research Objectives.** How do PC professionals’ experiences in PC influence their perceptions of end of life?

**Methods.** PC professionals from two PC organizations in Paris, France were invited to participate. Participants completed demographics information, the Templer Death Anxiety Scale (DAS), and a semi-structured interview regarding experiences in PC, their patients’ experiences, and personal views about end of life. Demographics and DAS scores were compared using a t-test. Common themes were extracted from the interviews. The IRB at the University of Kansas Medical Center approved this study.

**Results.** 29 PC professionals were interviewed (27 females, 2 males). No statistically significant differences
in DAS scores were found in comparisons across age, gender, religion, religiosity, and number of PC patients cared for in the last 2 years. Formal training in PC was the variable closest to statistical significance (P = 0.12); this may be clinically significant. Several common themes arose from analysis of interviews: fear of something other than death, desire for euthanasia, holistic patient care, improvement of quality and quantity of life for PC patients, impact on patients’ families, and a reorganization of PC providers’ life priorities.

**Conclusion.** Formal training in PC may substantially decrease providers’ fear of death, while notably improving quality of life for patients and their families. France may be a model to the world of a successful national system of PC and a holistic patient-centered approach to PC.

**Implications for Research, Policy or Practice.** It encourages additional training in PC to healthcare professionals.

**Antithrombotic Therapy upon Discharge to Hospice Care (S763)**

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**Objectives**

- Describe the prevalence of antithrombotic therapy upon discharge from acute care to hospice care.
- Describe the most frequent antithrombotic agents prescribed upon discharge to hospice.
- Identify patient and disease characteristics associated with receiving a prescription for antithrombotic therapy upon discharge to hospice.

**Original Research Background.** Patients transitioning to hospice care face difficult decisions regarding continuation of chronic medications.

**Research Objectives.** We quantified the frequency and characteristics of patients receiving antithrombotic therapy upon discharge from acute care to hospice care.

**Methods.** This was a retrospective cohort study of adult (≥21 years) patients discharged directly from Oregon Health & Science University to hospice care between 1/1/2010 and 6/30/2014. The primary outcome of interest was receiving an outpatient prescription for anticoagulation or antiplatelet therapy upon discharge to hospice care. Data were collected from an electronic repository of medical record data and through review of physician notes and hospital discharge summaries.

**Results.** Among 1141 eligible patients, 77 (6.8%) patients received a prescription for antithrombotic therapy upon discharge to hospice care. Aspirin (57.1%), enoxaparin (24.7%), and warfarin (20.8%) were the most frequently prescribed antithrombotic agents. Multivariable logistic regression analysis suggested that patients treated for a deep venous thromboembolism or pulmonary embolism on the index admission or with a history of atrial fibrillation or aortic/mitral valve replacement were significantly more likely to receive antithrombotic therapy upon discharge (p<0.05 for all). In contrast, patients with a history of cancer, cerebrovascular disease, or liver disease were significantly less likely to receive antithrombotic therapy (p<0.05 for all). Among the 77 patients who received a prescription for antithrombotic therapy upon discharge, 22% were not previously receiving antithrombotic therapy prior to the index admission. Among patients previously receiving antithrombotic therapy, more than half (55%) did not have any charted rationale for continuation.

**Conclusion.** Antithrombotic therapy upon discharge to hospice was associated with active treatment and comorbid conditions rather than terminal diagnoses. Decisions to continue antithrombotic therapy often lacked rationale in patients’ medical records.

**Implications for Research, Policy or Practice.** Further research is needed on the safety and effectiveness of antithrombotic therapy in hospice care and current drivers of medication decisions in the absence of these data.

**Facilitators of and Barriers to Interdisciplinary Communication and Collaboration in Palliative Care and Primary Care (S764)**

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**Objectives**

- Describe the facilitators of interdisciplinary collaboration to coordinate care for older adults living longer with serious illnesses.
- Identify and describe the barriers to interdisciplinary collaboration to coordinate care for older adults living longer with serious illnesses.
- Describe strategies to promote interdisciplinary communication and collaboration and awareness of primary and secondary palliative care.
Introduction. As a component of advanced illness management, palliative care in the outpatient setting can address the complex care needs of older adults living longer with serious illnesses. Communication and collaboration between primary care and palliative care providers is needed to deliver complex care management and to coordinate care, yet optimal strategies for collaboration are ill defined. This exploratory study revealed insights into the study question: What are the facilitators of and barriers to interdisciplinary interactions to coordinate care?

Methods. Participants were selected through snowball sampling from large academic and community healthcare systems with established community-based palliative care services. Twenty semi-structured interviews were conducted, including primary care and palliative care providers and their patients and families. Interviews were audio recorded and transcribed verbatim. Participants completed a brief survey regarding their background, education and experience with palliative care. Transcripts and field notes were analyzed using Grounded Theory techniques.

Results. Four major themes emerged from the data: (i) role clarity, (ii) feedback and collaboration, (iii) workforce need, and (iv) education. Interdisciplinary collaboration to coordinate care was facilitated by defining roles and responsibilities; frequent in person, email, or EMR communication; and education of primary care providers and patients and families regarding primary and secondary palliative care. Barriers that negatively impacted working relationships among primary care and palliative care providers included poor feedback that prevented a shared understanding of patient’s needs and goals of care. Other contributing factors were non-involvement of primary care providers when specialists referred patients to palliative care, lack of resources, and an unclear concept of community-based palliative care.

Conclusions/Policy. Data suggest the need for greater attention to processes that promote communication and collaboration as well as strategies to promote a greater awareness of primary and secondary palliative care.

Pilot Study of Subjective Taste and Smell Changes in Treatment-Naive Patients with Solid Tumors (S765)
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Objectives
- Describe the prevalence, severity and characteristics of taste and smell changes in treatment-naive patients with solid tumors.
- Examine the association between taste and smell changes, malnutrition risk and other symptoms in cancer.

Background and Aims. Taste and smell changes (TSCs) have been mostly studied in cancer post-chemotherapy (CT) or radiotherapy (RT) and in head and neck (H&N) tumors. They may present as part of a symptom cluster along with anorexia, early satiety and weight loss, which can negatively impact nutritional status. The aims of this study were to examine the prevalence, severity and characteristics of TSCs and their relationship with co-occurring symptoms in non-H&N solid tumors before CT or RT.

Methods. A prospective observational study was conducted. Forty consecutive pre-treatment cancer referrals who attended radiation oncology outpatients over a six-week period were recruited. Data on TSCs, symptoms, dietary intake and nutritional status were obtained by the Taste and Smell Survey and the abridged Patient-Generated Subjective Global Assessment (abPG-SGA). Weight and height were measured, and BMI was calculated. SPSS® was used for statistical analysis. Two-sided P values <0.05 were statistically significant.

Results. Most were newly diagnosed (70%; n=28). Nineteen (48%) reported TSCs. Nine noted stronger sweet taste, and seven noted stronger salt taste. Of those, four reported stronger and four weaker odor sensation. Those deemed at nutritional risk by the abPG-SGA had more TSCs (P=0.057). TSCs were significantly associated with dry mouth (P<0.01), early satiety (P<0.05), and fatigue (P<0.05).

Conclusions.
1. TSCs preceded CT or RT in almost half of treatment-naive patients with solid tumors, notable stronger sweet and salt tastes.
2. Most of those at nutritional risk reported TSCs.
3. TSCs were significantly associated with other symptoms.
4. Future research and clinical guidelines, with a common terminology for assessment, diagnosis and management of cancer TSCs are needed.

What Is a Serious Medical Decision? Patients’ And Surrogates’ Perceptions of Serious Decisions and What Is Important in Making Them (S766)
Laura Petrillo, MD, San Francisco Department of Veterans Affairs and University of California San Francisco, San Francisco, CA. Ryan McMahan, BS, University
Identify the types of decisions that patients encounter and consider serious medical decisions.

- Identify personal, spiritual and social influences on patient and family decision-making, and list differences between how patients and surrogates approach decision-making.
- Apply awareness of patient perceptions to counseling and decision-making support in clinical encounters with patients and families.

**Original Research Background.** Most people will face serious medical decisions, yet little is known about patients’ and surrogates’ perceptions of decisions they have made and how they made them.

**Research Objectives.** To describe the range of real-life decisions people defined as serious and explore the factors they cited as important in making those decisions.

**Methods.** We conducted 13 focus groups with racially and ethnically diverse English- and Spanish-speaking patients and surrogates who reported making a “serious” decision. Participants were recruited from county and Veterans hospitals, senior centers, and cancer support groups. We used semi-structured interviews to ask, “Think about a time you had to make an important or serious medical decision,” and “Did anything help you make the decision?”

We analyzed the data using qualitative, thematic content analysis.

**Results.** The mean age of the 69 participants was 69 years (±14), and 29% were African American, 26% white, 26% Asian/Pacific Islander, and 19% Latino. Participants discussed 168 decisions in five categories: 1) advance care planning, 23%; 2) cancer treatment, 23%; 3) acute medical crises, 21% (e.g., emergency surgery); 4) chronic illness, 17% (e.g., diabetes management); and 5) transitions, 16% (e.g., transition to hospice). Factors that patients identified as important in decision-making included: autonomy (38%), medical advice (36%), prior experiences (35%), avoiding suffering (30%), family opinion (29%), religion (22%), survival (19%), and their own research (16%).

**Conclusion.** Participants considered a full range of medical decisions to be serious and important, from life-sustaining treatment to diabetes management. They also relied on a variety of factors besides medical advice to help them make these decisions.

**Implications for Research, Policy or Practice.** Opportunities exist for decision support across the broad spectrum of decisions that patients and families perceive as serious and important. Such efforts should be tailored to patients’ values and should recognize the wide-ranging factors that patients weigh when making decisions.

**Palliative Care Core Competencies in Undergraduate Medical Education: Medical Student End-of-Life Care Training and Experience with Patient Death at Duke University (S767)**

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**Objectives**

- Understand the current exposure medical students receive to the care of dying patients on core clinical clerkships, such as medicine and surgery.
- Understand the current curricular challenges for teaching core competencies in undergraduate medical education, specifically care of the dying patient, death pronouncement, and self-reflection after death.

**Original Research Background.** The current methods of teaching medical students culturally appropriate end-of-life care and palliative care curricula remain non-standardized due to challenges of integrating palliative care principles into existing medical education models.

**Research Objectives.** We performed a cross-sectional, observational study to assess end-of-life care training and experience with patient death during clinical rotations for 2nd year (MS2) and 4th year (MS4) medical students at Duke University School of Medicine.

**Methods.** Electronic surveys were generated to assess demographic- and study-specific questions regarding exposure to palliative care curriculum and patient deaths. Each participant was assigned a study-specific identification number, and reviewers of surveys were blinded for data analysis.

**Results.** Participants included 29 MS2 and 18 MS4 students. Ninety-three percent (27/29) of MS2 students cared for less than five patients who died, and 24% (7/29) did not experience a patient death during their core clerkships. While 72% (13/18) of MS4 students cared for less than five patients who died, and 11% (2/18) did not experience a single patient death by graduation from medical school. Only 21% (6/29) of MS2 and 50% (9/18) of MS4 students witnessed a death pronouncement and exam being performed by an attending or resident. Seventy-percent (19/27) of MS2 and 89% (16/18) of MS4 students report participating in end-of-life discussions, such as family meetings, during medical school.
**Conclusion.** Medical students may be ill prepared to care for patients at the end of life after medical school training. Medical students at Duke University experienced, on average, less than five patient deaths prior to graduation. Few students experienced how to pronounce a patient death, and none received any formal training in this essential end-of-life skill.

**Implications for Research, Policy or Practice.** The results of our study have significant impact on early clinical education in palliative care, with the potential to lead to future research in curriculum design for undergraduate medical education for end-of-life care.

**Healthcare Utilization and Costs for Surviving Spouses Before and After Death in a Population-Based Sample of Individuals with Serious Illness (S768)**

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**Objectives**
- Describe patterns of healthcare utilization and costs for spousal caregivers of patients at the end of life.
- Compare healthcare utilization and costs before and after bereavement for surviving spouses.

**Original Research Background.** Family caregivers of patients with serious illness are at risk for poor health outcomes. Yet it is unclear how healthcare utilization is itself impacted by caregiving, particularly the high-stress caregiving that comes when an individual is at the end of life.

**Research Objectives.** The goal of this study was to determine healthcare utilization and costs before and after death among surviving spouses.

**Methods.** We used data from the Health and Retirement Study, a nationally representative cohort study of older adults in the United States, which is linked to Medicare claims data. Our sample consisted of 1474 married/partnered dyads over age 65, both with fee-for-service Medicare, in which one spouse died between 2002 and 2011. We determined the surviving spouse’s healthcare utilization (i.e., emergency department (ED), hospital, and intensive care unit (ICU) admissions) and costs (wage-index adjusted to 2012 dollars) at six-month intervals up to two years before and after their partner’s death.

**Results.** In the two years before their partner’s death, 34% of surviving spouses were hospitalized, compared to 13% after death. ED use was common before and after death (45-49%). ICU use increased after death of a spouse from 13% to 18%. Medicare costs steadily increased in this population over time from mean <$2500 18 to 24 months before the partner’s death to $5000 18 to 24 months after death.

The vast majority of these spouses served as primary caregivers, assisting with activities of daily living at the end of life.

**Conclusion.** The spouses of individuals who are at the end of life are themselves high healthcare utilizers.

**Implications for Research, Policy or Practice.** It is important to determine the healthcare utilization and cost trajectories associated with caregiving and bereavement. While there has been significant attention to the current unsustainable level of spending on healthcare at the end of life, these costs have not accounted for in the downstream effects on spouses, the majority of whom are also Medicare beneficiaries.

**Development of an Educational Intervention About End-of-Life Care Options for Seriously Ill African American Patients and Their Caregivers (S769)**

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**Objectives**
- Identify specific barriers to completion of advance care planning and hospice enrollment among members of the African American community.
- Describe the development of a video intervention designed to inform seriously ill African American patients and their caregivers about advance care planning, palliative care, and hospice.

**Original Research Background.** Research has shown that African Americans (AAs) are less likely to complete an advance directive and enroll in hospice at the end of life. Despite numerous studies that identify specific barriers to end-of-life care for AAs, there is little research dedicated to the design and implementation of interventions to address these issues.

**Research Objectives.** Describe development and adaptation of a culturally sensitive video intervention designed to increase knowledge and awareness of and address barriers to advance care planning, palliative care, and hospice among seriously ill AA patients and their caregivers.

**Methods.** Semi-structured, video-recorded interviews were conducted with six AA providers and recipients of hospice and/or palliative care (a physician, nurse practitioner, minister, patient, and two caregivers) that addressed previously identified barriers to end-of-life care. From these interviews, we selected targeted video clips, and combined them with culturally appropriate graphics and narration. Resulting video components were viewed by focus groups comprised
of providers (hospice/palliative care and geriatrics) and community-dwelling African Americans who were patients or caregivers of patients who received care at our University-affiliated hospitals or clinics.

**Results.** Focus group participants indicated that increasing awareness of various care options for AAs is important, and culturally sensitive intervention development is needed. Feedback obtained addressed appropriateness, understanding, and acceptability of messaging, topic areas, and length of the video. We used participants’ feedback to modify the video clips, graphics, and narration to facilitate greater understanding and acceptability.

**Conclusion.** This video intervention proved acceptable to the patients, caregivers, and healthcare workers who provided input. Feasibility and acceptability of the modified intervention will now be tested among seriously ill AA patients and their caregivers.

**Implications for Research, Policy or Practice.** While previous research has identified barriers to end-of-life care among members of underrepresented groups, this study is among a small number of studies which we are aware to operationalize research findings into intervention components addressing these barriers.

**Aid to Our Front Line Warriors: A Brief End-of-Life Communication Curriculum for Internal Medicine Interns (S770)**

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**Objectives**

- Describe the components of a brief end-of-life communication skills training curriculum.
- Recognize the benefit of a brief communication training session using a multimodal teaching approach including didactics, simulation and feedback.

**Original Research Background.** Internal medicine interns (interns) are the physicians spending the most time with hospitalized patients, frequently assisting with end-of-life (EOL) decision-making. However, most report feeling ill-equipped for these situations. Multimodality hands-on training, including didactics, practice and feedback, have been effective in improving skills/confidence in EOL communication.

**Research Objectives.** To assess a brief hands-on EOL communication curriculum for interns (PC-I).

**Methods.** Interns (n=24) participated in PC-I comprised of a one-hour didactic, a one-hour role play, and two observed structured clinical encounters: Breaking Bad News (BBN), Family Meeting (FM) with real-time evaluation (skills checklist/ written comments), and preceptor feedback. Self-Efficacy in Palliative Care (PC) Communication sub-section (SPEC-C) evaluated pre/post curriculum self-assessment of competence. Participants provided subjective post-curriculum impressions.

**Results.** 45.8% had no prior PC training. BBN and FM checklist mean score was 32.2 /45 (Min 18, Max 41, SD 4.67), and 26.6 /39 (Min 15, Max 38, SD 6.12), respectively. Checklist-identified improvement themes: 1) introducing PC; 2) assessing patient/family desire for prognostic knowledge; 3) exploring patient/family emotional state; and 4) summarizing discussion. Preceptor feedback identified four improvement themes: 1) setting meeting agenda “warning-shot”; 2) avoiding medical jargon; 3) discussing prognosis; 4) appropriate utilization of surrogate decision-maker. Intern impressions identified four major themes: 1) safe environment for skills practice; 2) confidence to perform skills in clinical setting; 3) valued feedback; 4) patients/families appreciate direct conversations about death/dying and prognosis. SPEC-C showed improvement in self-perceived confidence discussing patient’s death with patient (p<0.05), with family (p=0.07), with family during bereavement (p<0.05).

**Conclusion.** A brief, hands-on, multimodality EOL communication curriculum is a valuable learning experience for interns at early stages of their career, which can improve confidence and identify specific areas for continued skill development.

**Implications for Research, Policy or Practice.** Further research is needed to assess long-term impact of brief communication curriculum as it pertains to improved clinical outcomes.

**What Helps and Hinders Oncologists from Conducting Goals-of-Care Conversations? (S771)**

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**Objectives**

- Identify five facilitators of goals-of-care conversations.
- Identify five barriers of goals-of-care conversations.
- Identify three remediable barriers of goals-of-care conversations.

**Original Research Background.** Goals-of-care (GoC) conversations reduce hospital and ICU
admissions while improving quality of life, yet only 37% of advanced cancer patients report having had them, and most happen near the very end of life.

**Research Objectives.** To describe oncologists’ perspectives on facilitators of and barriers to GoC conversations with patients with advanced cancer.

**Methods.** Semi-structured interviews with oncologists at academic, community, and municipal hospitals (n=4) in New York and Connecticut. Topics include approach to GoC conversations, facilitators, barriers, and organizational influences. We analyze data using interpretive description.

**Results.** Participants to date (n=12 of 25) are 83% male, they have a mean age of 45 (range 32-66) and 18 years (range 6-40) in practice, and 50% received training in GoC. Facilitators of GoC conversations include patient characteristics of higher health literacy and poor functional status and having a supportive practice environment (e.g., palliative care resources). Barriers include patient characteristics of being young and newly diagnosed, patient-family conflict, and physicians’ emotions. Although most participants felt GoC conversations should be ongoing, some reported two distinct conversations: an early “introductory” conversation about cancer basics and treatment goals and a “near the end” conversation about risks and benefits of further treatment and DNR. These conversations had different triggers. Perceived best timing of GoC conversations varied by subspecialty.

**Conclusion.** While data collection is ongoing, we have identified facilitators of and barriers to GoC conversations, some of which may be remediable by enabling oncologists to conduct GoC conversations despite difficult circumstances and emotional reactions, activating patients/family via increasing health literacy or peer support, advancing palliative-informed practice environments, and creating subspecialty-specific guides for timing of GoC conversations. Analyses are underway to help clarify the two distinct content conversations and connections between them.

**Implications for Research, Policy or Practice.** By addressing findings in Oncotalk, a program to train oncologists in palliative care skills, we hope to improve content and timing of GoC conversations.

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**Hearing Loss in the Last Two Years of Life: A Population-Based Study (S772)**

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**Objectives**
- Describe the prevalence of hearing loss during the last two years of life.
- Describe factors associated with hearing loss in the last two years of life.

**Original Research Background.** Epidemiologic data on the prevalence of hearing loss near death is lacking.

**Research Objectives.** To assess the prevalence and correlates of hearing loss during the last two years of life.

**Methods.** We used the Health and Retirement Study, a longitudinal population-based cohort of adults age >50 followed through death (2000 to 2013). The interview within the two years closest to death was used. Participants were asked to rate their hearing (excellent, very good, good, fair, or poor). We used survey weights to describe the population prevalence and correlates of fair/poor ratings in the two years before death and in six-month increments prior to death.

**Results.** Of 5895 participants (mean age at death 78 years; 53% women, 20% non-white), overall, 32% rated their hearing as fair/poor (95% CI 31-34%). The prevalence of fair/poor hearing increased as death approached (29% 19-24 months prior to death; 36% 1-6 months prior to death; p for trend = 0.01). Correlates of fair/poor hearing during the last two years of life included: age at death (prevalence of fair/poor hearing by age: 50-59 22%, ≥90 50%), gender (men 35%, women 30%), ethnicity (Latino 42%, white 33%), wealth (lowest quartile 38%, highest quartile 27%), history of heart disease (yes 38%, no 27%), dependence in activities of daily living (yes 42%, no 26%), and probable dementia (yes 44%, no cognitive impairment 24%).

**Conclusion.** Hearing loss is increasingly common as death approaches, and it is associated with physical, cognitive, and social vulnerability.

**Implications for Research, Policy or Practice.** Research is lacking. New strategies to screen for and manage hearing loss in diverse populations of dying older adults are needed. Medicare should cover a range of hearing services in the elderly, including hearing aids, not just expensive cochlear implants.

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**What are the Facilitators of Public Reporting of Hospice Quality? (S773)**

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DC. Donna Infeld, PhD, The George Washington University Hospital, Washington, DC. Marsha Regenstein, PhD, George Washington University, Washington, DC.

Objectives
- Understand hospices’ preparation for public reporting of quality data.
- Understand attitudes towards the voluntary disclosure of hospice quality data.

Original Research Background. The Affordable Care Act requires submission of hospice quality data to the Centers for Medicare and Medicaid Services (CMS). Since 2014, hospices have been submitting the hospice item set and collecting experience-of-care data. CMS has not set a date for releasing data in a “hospice report card.” Some have advocated the voluntary release of data, while others have advocated waiting for CMS to make data public.

Research Objectives. Explore attitudes towards and preparation for public reporting and identifying barriers and facilitators.

Methods. Web-based survey of US hospices fielded during 2012 supplemented with 15 interviews with non-hospice provider stakeholders. Logistic regression to predict: (1) odds of hospices identifying a need for CMS reporting, and (2) their willingness to publicly share data ahead of CMS’ public release. Predictor variables were hospice size, tax status, EMR implementation, and use of the Family Evaluation of Hospice Care Survey.

Results. 390 of 1451 hospices (26.9%) responded to the survey. Hospices were confident in their ability to comply with the public reporting mandate; the majority (71.5%) believed CMS reporting is needed. For-profit and smaller hospices were significantly less likely to see the need for reporting; hospices with full EMR implementation were more likely than others to support reporting (OR = 2.581). Hospices were willing to consider voluntarily sharing quality data; other stakeholders worried consumers won’t use the data and emphasized the need for careful measure specification.

Conclusion. As the plan to publicly disclose hospice quality data evolves, CMS and the hospice industry will benefit from careful consideration of the most appropriate measures and how those measures can best serve multiple stakeholders. Continued investments in EMRs will likely facilitate hospices’ ability to measure, monitor, and report on performance.

Implications for Research, Policy or Practice. Researchers and practitioners must work closely with policymakers to ensure optimal implementation of a program that maximizes uses of the data and minimizes unintended consequences.

Hospice Staff Perceptions of Communications with Seriously Ill Individuals and Families Prior to Hospice Enrollment (S774)
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Objectives
- Show an increased level of knowledge about information provided by hospice admissions staff during pre-enrollment meetings with seriously ill individuals and families.
- Show an increased level of knowledge about communication needs seriously ill individuals and families express during pre-enrollment meetings.

Original Research Background. Hospice care providers’ communication with seriously ill individuals and families prior to enrollment in hospice care has received little attention. Prior research consistently reported lack of knowledge about hospice as one of the major contributing factors of lower rates of hospice use among general populations and particularly among racial/ethnic minorities. Visits by hospice admissions staff with seriously ill individuals/families prior to the receipt of services may be able to clarify misunderstandings and increase the level of knowledge about hospice care services so that informed decisions are possible.

Research Objectives. This qualitative study explored hospice care providers’ perceptions of communication with seriously ill older individuals and their families during pre-admission visits.

Methods. Individual, face-to-face interviews were conducted with fifteen hospice admissions staff members. Open-ended questions were asked about the focus of communication and perceived communication needs of older individuals/families that were referred for hospice care. Thematic analysis of the interview transcripts was conducted.

Results. Themes from the analysis revealed that the communication during pre-enrollment visits centered on tailored information about the individual’s diagnosis and hospice services that could address specific individual and family needs. Communication needs were identified regarding clarification of common misunderstandings about artificial nutrition/hydration and fears and concerns about administration of pain medications. In addition, need for further discussion with doctors about diagnosis and prognosis of the illness was discussed. Finally, eventual decisions to enroll in hospice tended to be influenced by different cultural family dynamics.

Conclusion. Educational needs in understanding the illness and comfort care measures were identified in this study.
Implications for Research, Policy or Practice. Hospice care providers can use pre-admission visits as an opportunity to promote accurate understanding of hospice care and to relieve seriously ill individuals’ and families’ anxiety in this often difficult decision-making process. Also, in-depth discussions with doctors regarding diagnosis/prognosis and end-of-life care options are needed for easier transition to hospice care.

How Come They Don’t Come? Identifying Reasons of No-Shows Among a Palliative Care Outpatient Clinic (S775)
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Objectives
- Assess factors affecting no-shows of patients to an outpatient palliative care clinic.
- Discuss potential solutions to decrease no-shows among palliative care patients who need the follow-up.

Original Research Background. Palliative Care (PC) patients often experience complex distress that is better addressed by an interdisciplinary PC outpatient clinic than by standard outpatient care. PC patients, like many clinic patients, do not always keep appointments. These no-shows (NS) are missed appointments with no prior cancellation notice.

Research Objectives. To assess factors that correlate with PC patients missing clinic appointments.

Methods. A telephone survey was performed for patients that were NS for clinic appointments from November 2014-April 2015. Information obtained from patients or caregivers. A telephone script with 19 questions was used.

Results. N = 76. Female = 39. 38 agreed to participate in the telephone survey, 21 declined participation, and 17 had non-working phone numbers. Reasons identified for NS: 10 hospitalized, seven deceased, six too sick, three hospice, five never seen in clinic/didn’t know reason to attend, four no reminder call, one transportation issues, and two denied missing. 13/14 patients reported prior visit as beneficial. Identified benefits were: managing pain, symptoms and spiritual concerns with prior visit.

Conclusion. Patients with NS had many reasons for missed appointments, such as hospital admissions, symptom burden, and not understanding/knowing about clinic appointment. Developing a more systematic appointment reminder system might help us free up appointments for other patients and remove deceased, hospitalized/hospice patient’s and make those patients who are unaware of appointment better informed. Also close follow-up phone calls after NS might help by triaging symptoms or issues that lead to NS and might improve patient care.

Implications for Research, Policy or Practice. Evaluating NS can make PC clinics more efficient, expand reach to greater number of patients, and reduce patients lost to follow-up and suffering from untreated symptom burden and spiritual distress.

Protecting Our Vulnerable Population: Screening for Mistreatment in Palliative Care (S776)
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Objectives
- Discuss the impact of mistreatment among vulnerable palliative care patients.
- Recognize the need to improve awareness and identification of mistreatment in palliative care populations.

Original Research Background. Palliative Care (PC) patients are a vulnerable population. While the incidence of mistreatment in other vulnerable populations has been defined, approaching 10% of the elderly and 50% of those suffering from dementia, the incidence of mistreatment in PC not well defined.

Research Objectives. To assess rate of PC patients who establish concern for mistreatment (ECM) and identify its risk factors.

Methods. Patients seen by the PC clinical service of a tertiary hospital (inpatient and outpatient) were screened for mistreatment over 30-day period using two mistreatment screening tools validated among elderly: Elder Abuse Suspicion Index (EASI) and Caregiver Abuse Screen (CASE). Patients able to participate in a survey were screened using EASI. Caregivers were screened with CASE if patient was unable to participate or reported relying on caregiver. EASI score ≥ 1 (max 6) and CASE ≥ 4 (max 8) ECM.

Results. N = 64 (47 inpatients, 17 outpatients, all with common PC diagnosis). 58% female; 11% elderly; 53% Hispanic; 63% with cancer diagnosis; 55% rely on caregiver. Forty-five completed EASI only, four CASE only, and 15 both. Eleven (17.19%) were ECM.
cases. A significant relationship was found between presence of PC diagnoses and ECM, [p = 0.01].

EASI question #2 (preventing access to resources/people/medical care, p = 0.02), #3 (verbal shaming, p<0.001) and CASE question #2 (caregiver shameful of actions, p=0.005), #4 (caregiver acting rough, p=0.02), and #7 (caregiver exhaustion, p=0.006) were significant to ECM.

**Conclusion.** The rate of PC patients who ECM is similar to other vulnerable populations. ECM risk factors included PC diagnoses; further risk factor identification was limited by small sample size and variable applicability of elderly-targeted, validated scales.

**Implications for Research, Policy or Practice.** Larger scale studies are needed to identify risk factors for PC mistreatment and to develop validated PC mistreatment screening tools, ultimately improving patient care for vulnerable PC patients and targeting risk factors such as caregiver burden.

**Impact of a Pediatric Palliative Care Team on Limitations of Care for Inpatients at a Free-Standing, Tertiary-Care Children’s Hospital (S777)**

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**Objectives**
- Understand the role of pediatric palliative care in end-of-life discussions.
- Identify further opportunities for do-not-resuscitate (DNR) research and analysis of advanced care planning in pediatrics.

**Original Research Background.** Discussions surrounding limitations of care can invoke controversy, confusion, and anxiety in both healthcare professionals and families. Some literature exists regarding the impact of pediatric palliative care teams on ICU admission, cost, and family satisfaction. Limited information, however, is available regarding the factors involved in end-of-life decisions. Understanding these factors may improve the process of evaluating and placing limitation-of-care orders in children.

**Research Objectives.** Our study aims to analyze the timing of DNR order placement prior to death in pediatric patients. We also aim to further delineate the speciality of the ordering physician, demographic data, and location of death.

**Methods.** We present a retrospective review of 471 deaths between 1/2009 and 10/2014. The palliative care team was established in September, 2011. For those patients who had a DNR order in place, we analyzed patient and physician characteristics as well as DNR order timing.

**Results.** The location of death of 49% of patients who had a DNR in place was in an ICU setting. The death rate in the ICU was not statistically different following initiation of the palliative care team (PCT) (p=0.59). The overall DNR rate increased following initiation of the PCT from 30.8% to 39.2% (p=0.05). The PCT was consulted in 77% of deaths and ordered the DNR in 60% of children.

**Conclusion.** Our results emphasize the important role of the palliative care team during end-of-life discussions in children. The palliative care team met with more than three quarters of families prior to death, and they placed the DNR order in more than half of these instances. The initiation of the palliative care team was associated with a large increase in overall DNR rates.

**Implications for Research, Policy or Practice.** Additional studies are needed in pediatrics to further delineate the timing of palliative care consultation in the patient’s overall course of illness, demographic and cultural influences, and specific patient conditions, such as tracheostomy dependence.

**Unintended Consequences: Exploring the Effects on Palliative Care Outpatients of Recent Changes in Florida Laws for Prescribing Controlled Pain Medications (S778)**

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**Objectives**
- Understand the changes in Florida laws that govern prescribing controlled pain medications that took place beginning in 2010.
- Identify the positive and intended outcomes from Florida’s enforcement action against “Pill Mills” and its new pain laws.
- Identify the unintended negative outcomes from Florida’s enforcement action against “Pill Mills” and its new pain laws.

**Original Research Background.** In 2010, Florida implemented plans to reduce opioid misuse and related deaths by eliminating rogue pain clinics or “Pill Mills.” Its new laws explicitly avoided limitations on prescribing controlled medications for cancer-related pain.

**Research Objectives.** To assess Florida’s efforts to eliminate “Pill Mills” and restrict prescribing of controlled pain medications for chronic nonmalignant pain, including effects on patients receiving outpatient palliative care at a university-affiliated comprehensive cancer treatment center.

**Methods.** We reviewed state and federal government reports on prescription drug deaths, print and
television media reports, and cancer center pharmacy shortage reports, and we interviewed cancer center outpatients about their experiences.

**Results.** Between 2010 and 2014, the number of registered pain clinics in Florida decreased from more than 900 to 367. The death rate from prescription drug overdoses in Florida fell by 23 percent from 2010 to 2012. From 2013 to 2014, however, deaths from heroin-related overdoses increased 84 percent. From November 2012 until September 2014, the outpatient pharmacy at our cancer center experienced monthly shortages of opioid analgesics, most often 15- and 30-mg tablets of oxycodone. These shortages occurred in the last seven to 10 days of each month, and about one-third of clinic patients reported visiting three to four alternate pharmacies to fill their prescriptions. By early 2015, a special series of reports televised patients’ difficulties in filling legitimate prescriptions for controlled pain medications, including several pharmacies’ denial of pain medications to terminally ill cancer patients. About one-fifth of outpatients in our palliative care clinic reported similar challenges obtaining pain medications.

**Conclusion.** Florida’s action against “Pill Mills” and opioid analgesic abuse were associated with a 23 percent reduction in deaths from prescription drug overdoses, but these efforts were also associated with an 84 percent increase in heroin deaths. Despite a clear legislative intent to protect cancer patients, many terminally ill cancer patients experienced Florida’s denials for prescriptions for legitimate pain medications.

**Implications for Research, Policy or Practice.** Well-intended efforts to reduce prescription drug misuse and diversion may result in unintended consequences that can be harmful to vulnerable patient populations, such as those receiving outpatient palliative care.

**A Comparison of Continuing Bonds Over Time in Bereaved Parents and Siblings After the Death of a Child (S779)**

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**Objectives**

- Compare purposeful and non-purposeful continuing bonds between one and two years post-death.
- Compare comforting and discomforting effects of continuing bonds between one and two years post-death.

**Original Research Background.** Continuing bonds refer to bereaved individuals maintaining connections with the deceased. Continuing bonds have been described as a coping strategy for bereaved individuals, but few studies have compared similarities and differences in how bonds evolve over time.

**Research Objectives.** This study compared reports of continuing bonds from bereaved parents and siblings at one (T1) and two (T2) years after the death of a child to cancer.

**Methods.** Twenty-six families participated in both years of the study. Participants included mothers (n = 21), fathers (n = 15), and siblings (n = 25). Semi-structured home interviews using open-ended questions were conducted with parents and siblings separately. Content analysis identified emerging themes and included counts and frequencies of participant responses. McNemar tests examined differences in the frequency of responses between T1 and T2 data.

**Results.** Similar to participants’ reports at one year post-death, themes emerging from participants’ reports at two years post-death included purposeful (e.g., visual representations of the deceased, visiting the cemetery, communicating to the deceased) and non-purposeful (e.g., dreams about the deceased, visits/signs from the deceased) continuing bonds and comforting and discomforting effects. Frequency reports of each category at T1 and T2 will be presented. Comparisons between T1 and T2 data were not statistically significant.

**Conclusion.** Reports of continuing bonds from bereaved parents and siblings after the death of a child are similar at one and two years post-death. Continuing bonds may be a long-term coping strategy used by bereaved individuals.

**Implications for Research, Policy or Practice.** Providers should be mindful to assess continuing bonds with bereaved families and aware that effects can be both comforting and discomforting. More research is needed to determine how to facilitate positive effects from continuing bonds and whether interventions to promote bonds could be helpful.

**Impact of an Interprofessional Training Program in Pediatric Palliative Care on Interprofessional Competencies and Career Development of Former Fellows (S780)**

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Boston, MA. Joanne Wolfe, MD MPH FAAHPM, Dana-Farber Cancer Institute, Boston, MA.

**Objectives**
- Identify benefits and challenges of interprofessional education in pediatric palliative care at a post-graduate level.
- Evaluate career trajectories of pediatric palliative care fellows after fellowship.

**Original Research Background.** Interprofessional education (IPE) has been recognized as foundational to preparing clinicians for collaborative practice and enhanced patient care. While practice standards for pediatric palliative care (PC) utilize a team-based, interprofessional model, standards for pediatric IPE have not been established.

**Research Objectives.** This study is the first to report outcomes of an interprofessional fellowship program in pediatric PC. The objectives were to evaluate the impact of the program on former fellows’ interprofessional competencies and career progression.

**Methods.** Fellows who participated in the program between 2002 and 2014 were surveyed about their fellowship experience, perceived change in interprofessional skills, and career paths post-fellowship. The 10 interprofessional competencies surveyed were adapted from core competencies issued by the Interprofessional Education Collaborative, spanning the domains of values and ethics, roles and responsibilities, interprofessional communication, and teamwork.

**Results.** Of the 29 fellows, 27 (93%) responded. Fifteen (56%) were physicians, five (19%) were nurse practitioners, and seven (26%) were social workers. Respondents reported significant improvements in all 10 interprofessional competencies, with summed mean scores of 2.8±0.6 pre-fellowship (representing “not very well prepared”) and 4.4±0.4 post-fellowship (“very well prepared” to “extremely well prepared”) (t =13.8, p<.0001). Respondents reported significant career changes, including increased specialization in PC (4% vs. 70%) and academic focus (26% vs. 55%). Compared to pre-fellowship clinical practice, respondents reported increased involvement in interprofessional teams (53% vs. 100%), with 81% in PC teams and 35% in hospice teams. Qualitative analysis of open-ended responses illustrated that fellows experienced professional growth in a rich educational environment highlighted by dynamic interprofessional relationships, scaffolded clinical instruction, and expert mentorship. Although complex team dynamics, inefficiency, and differences in educational needs were identified as challenges in IPE, all respondents reported that the benefits of IPE outweigh the negatives.

**Conclusion.** This study demonstrates that interprofessional training in pediatric PC is feasible and effective in developing clinicians skilled in interprofessional practice.

**Benefits of Palliative Care in the MICU (S781)**

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**Objectives**
- Assess the effects of a palliative care consultation service in ICU admissions, cost savings and length of stay.
- Discuss benefits of palliative care in the ICU setting.

**Research Background.** It has already been documented that inpatient palliative care consultation (PCC) can reduce both length of hospitalization and inpatient costs among seriously ill individuals who are admitted to the intensive care unit (ICU). More information on the cost impact of ICU PCC may contribute to additional support from hospital administrators and ultimately lead to more resources to care for terminally ill patients.

**Research Objectives.** To compare ICU admission rates, ICU readmission rates and inpatient costs for patients who received a PCC vs. matched patients who received usual standard of care.

**Methods.** We analyzed de-identified data for a 40-month period (January 2012 to April 2015), including all patients admitted to the MICU at a teaching tertiary county hospital. Of the 86,131 hospital admissions, there were 1449 patients with 3829 visits to the MICU. We matched PC patients with standard care (SC) patients using DRG and discarded those without at least three matches. N=1347 matched MICU patients. 40% were female. 931/1347 patients had a PCC.

**Results.** There was a statistically significant decrease in PPC group with median length of stay of nine days vs. 15 days in the non-PCC group (p<0.0001). Difference in mean total charges was $79,348 with non-PCC group at $196,293 vs. PCC group at $116,945 (p<0.0001). There was a non-significant trend for decreased repeat ICU admissions with PCC group mean = 1.05 and non-PCC group mean = 1.08 (p=0.089).
Conclusion. This study revealed that ICU PCC decreased both length of stay and inpatient costs. Although not significant, this study also revealed that repeat ICU admissions trended down with ICU PCC.

Implications for Research, Policy or Practice. PCC can be an effective way to reduce healthcare expenditures in critically ill patients, and further studies are needed to determine specific PCC benefits among patients with specific diagnoses.

Awareness of Medical Orders for Life-Sustaining Treatment and Non-Hospital, Do-Not-Resuscitate (DNR) Orders Among Primary Care Pediatricians (S782)
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Objectives
- Understand disparities in outpatient DNR/DNI orders among primary pediatrics.
- Understand the need for education about outpatient DNR/DNI discussions.

Original Research Background. With the recent announcement of Medicare to reimburse physicians for talking with patients about end-of-life options, little is known about the awareness of pediatricians in outpatient do-not-resuscitate/do-not-intubate (DNR/DNI) discussions.

Research Objectives. Assessing the knowledge, utilization and experience of primary care pediatricians (PCPs) with outpatient Medical Orders of Life Sustaining Treatment (MOLST) and Non-Hospital-DNR (NH-DNR) orders.

Methods. A survey was distributed in person or by email to PCPs affiliated with three urban teaching community hospitals. Demographic data, awareness of MOLST, NH-DNR, New York State DNR (NYS-DNR) bracelet, and palliative care specialist were collected.

Results. Of 45 physicians who responded to the survey, three were not practicing in a primary care setting and were excluded. From the total number of PCPs, 55% were female and 48% described their ethnicity as Asian or Pacific Islander. 78% were 45 years of age, 64% were practicing >15 years, and 62% saw <250 patients each month. Only 12% had previously issued an outpatient DNR. 83% were unaware of NYS-DNR bracelet. 67% were not comfortable with DNR discussion. 83% preferred an outpatient palliative care referral for DNR discussion. 74% favored formal training in outpatient DNR discussion. 57% would discuss DNR only when asked by guardian; 36% would only discuss DNR with terminally ill patients, patients residing in long-term care facility, or all patients requiring long-term care services; and 7% would discuss DNR in other circumstances. The reasons for not issuing outpatient DNR were: 84% said there was no appropriate patient, 8% were unaware that outpatient DNR was valid in NYS, and 8% cited other reasons.

Conclusion. More than half of PCPs felt that they were unprepared for and not comfortable with discussions about resuscitation.

Implications for Research, Policy or Practice. There is definitely recognition for palliative care providers that might suggest a change in the focus of teaching and education around palliative care from inpatient to outpatient settings.

Responding to Urgency of Need in Palliative Care: Initial Stage of Development of a Decision Aid for Palliative Care Triage (S783)
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Objectives
- Comprehend the factors that indicate urgency of palliative care needs.
- Articulate the challenges and barriers associated with the triage process in palliative care.

Original Research Background. Demand for inpatient and community-based palliative care (PC) is growing. This trend is due to an aging population, earlier integration of PC in cancer care, increasing involvement of PC in non-malignant disease, and increasing community awareness of palliative care. Thus a diverse patient population referred from a variety of sources must be triaged for allocation of limited clinical resources.

Research Objectives. The aim of this study was to explore the experience of health professionals when triaging PC needs as an initial step in developing a decision aid that can facilitate the equitable, efficient and transparent allocation of PC services by urgency of need.

Methods. Twenty purposive-sampled general and specialist PC health professionals (medical n=9, nursing n=9, allied health n=2) from metropolitan and regional locations across Victoria, Australia
participated in focus groups or individual interviews. A semi-structured interview guide sought to explore perspectives on indicators of urgency and facilitators and barriers to implementation. Transcripts were subjected to deductive thematic analysis by two researchers.

**Results.** Health professionals shared commonality in the factors they found useful to determine urgency, such as current or impending mismatch between care needs and care environment. Performance status was reported to be less important when considered in isolation. Interpersonal and ethical challenges associated with the triage process and systemic barriers for implementing a decision aid were highlighted.

**Conclusion.** Indicators of urgent PC needs are complex, dynamic and often inter-related, but are useful for PC health professionals undertaking the difficult task of triage. The results of this study will form the basis of a future discrete choice experiment to determine the relative importance of each triage factor.

**Implications for Research, Policy or Practice.** This study will have important implications for the development of a decision aid that will enable a standardized approach to ensuring equitable, efficient and transparent PC service allocation.

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**Yes, I Can Live with Less Pain: A Pain Educational Intervention Improving Patient-Centered Care and Attitudes Among Older Adults (S784)**

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**Objectives**

- Discuss how a patient-centered educational intervention may improve attitudes towards pain management among older adults.
- Demonstrate the impact of an outpatient-centered educational intervention in future decisions related to pain medication utilization.

**Original Research Background.** Uncontrolled chronic pain is very common among older adults (OA). Pain is a complex symptom with subjective measurements that is also difficult to manage due to social stigma related to treatment.

**Research Objectives.** To assess if case-based, low-literacy educational interventions may influence knowledge, attitudes and behaviors related to pain management among OA.

**Methods.** A case-based, low-literacy, bilingual video was developed to educate OA on medication side effects, address addiction fears, and encourage OA to discuss pain with their clinicians/families. Educational intervention included a short presentation by a healthcare professional followed by video. Intervention targeted OA at six senior care centers. Bilingual pre- and post-questionnaires were administered.

**Results.** N=114, mean age 76.85 (73%) female and 31 (27%) male. 29% OA stated that they “worry” about taking pain medications, with 8% of those who responded specifically stating they would be concerned regarding addiction. When comparing pre-/post-survey results, 40% positively shifted from initially answering they would be worried regarding addiction to pain medications (56.3%) to after the intervention answering they would worry less regarding addiction (16.8%) (p<0.001). 48.3% OA also initially stated it would be easy to discuss pain with clinicians, and this number increased to 73.3% OA answering after the intervention that they would feel comfortable discussing their pain symptoms with clinicians (p<0.0014).

**Conclusion.** This pilot study demonstrated that patient-centered educational interventions can empower OA to discuss pain-related concerns with their clinicians as demonstrated by the positive shift in response when OA were asked if they would feel comfortable discussing their symptoms. This intervention also alleviated fears of OA regarding pain medication side effects, such as addiction.

**Implications for Research, Policy or Practice.** Future interventions are needed to develop validated questionnaires regarding pain and pain medication effects to encourage OA to have their pain addressed early and with their physicians.

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**Patient-Controlled Analgesia for Cancer-Related Pain: Clinical Predictors of Patient Outcomes (S785)**

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**Objectives**

- Review current evidence for patient-controlled analgesia (PCA) use in the inpatient setting.
- Define characteristics in patients admitted with cancer-related pain on PCAs, and describe the relationship between these variables and patterns of PCA use and hospitalization.
• Describe future research that will help to refine PCA use in cancer-related pain.

**Original Research Background.** Patient-controlled analgesia (PCA) is widely used in the inpatient setting for uncontrolled pain, and it is well studied in the post-operative setting. Data regarding its use for patients admitted with cancer-related pain, however, is limited.

**Research Objectives.** The purpose of this study is to define the patterns of PCA use and related outcomes in a retrospective cohort of patients admitted to the hospital with cancer-related pain.

**Methods.** We identified 90 patients admitted to a single academic center with a cancer diagnosis who received PCA for non-surgical, cancer-related pain and who survived to discharge between January 2013 and January 2014. Data including patient demographics, type of cancer and pain, time from admission to PCA initiation to PCA discontinuation to discharge, opioid-specific adverse events, and 30-day readmission rates for pain were collected. Univariable and multivariable linear regression models were used to look for any association between patient and clinical variables with PCA duration. Logistic regression models were used to evaluate the relationship between patient and clinical variables and 30-day readmission rates.

**Results.** The median length of hospitalization was 10.15 days with a median PCA duration of 4.40 days. Hematologic tumors were associated with longer PCA use (p=0.0001), as was younger age (p=0.032). There was a borderline-significant trend towards decreased 30-day readmission rates with longer PCA use (p=0.054). No correlation was found between 30-day readmission and any covariate studied, including palliative care consult, sex, pain type, cancer type (solid vs. hematologic), age, or time from discontinuation of PCA to discharge.

**Conclusion.** This study found that, in patients admitted with cancer-related pain, there is longer PCA use in younger patients and in patients with hematologic malignancies, with a trend towards decreased 30-day readmission rates in those with longer PCA use.

**Implications for Research, Policy or Practice.** Future research is needed to identify subsets of oncology patients that will benefit the most from PCA use.

**The Acceptability to African Americans of a Structured Conversation Guide to Improve Advance Care Planning (ACP) in the Setting of Cancer: A Tiered Focus Group Study (S786)**

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**Objectives**
- Understand disparities between African American and European Americans in receipt of high-quality end-of-life care and in advance care planning.
- Incorporate evidence-based communication strategies for addressing disparities in advance care planning with African Americans.

**Original Research Background.** African Americans are likely to receive worse end-of-life (EOL) care and are less likely to participate in advance care planning (ACP) and enroll in hospice than European Americans. Literature points to the impact of religion, mistrust, preferences for life-sustaining treatment, family-decision making styles, and health literacy. Early and effective ACP conversations are associated with improved EOL outcomes, including more goal-concordant care. Preliminary data suggests that a serious illness conversation guide ("guide") embedded in a systems based approach to improving illness care leads to more, better, and earlier conversations about patient goals and priorities in a predominantly white and middle class population of cancer patients. We hypothesized that African American participants would suggest or approve of modifications to the guide that addressed religion and spirituality.

**Research Objectives.** To determine acceptability of a structured conversation guide to improve ACP among African Americans.

**Methods.** In this first phase of a two-phase study to adapt the guide for use in more diverse populations, we conducted a series of focus groups with experts in disparities and the care of seriously ill African Americans, African American church members, and seriously ill patients and their caregivers to identify barriers to ACP and to determine the acceptability of a guide to improve the timeliness and quality of conversations to identify goals and priorities for care. We used template analysis to code anticipated and novel themes.

**Results.** Participants endorsed multi-level structural barriers to ACP, some of which may be addressed through modification of the guide. Participants found the guide to be acceptable when it included a question that allowed space for discussion of coping mechanisms, including faith and family.

**Conclusion.** African American participants in our focus group study found acceptable the use of a serious illness conversation guide to identify patient goals and priorities.

**Implications for Research, Policy or Practice.** These results support the use of a
structured communication tool to improve ACP in diverse populations.

**Impact of Creating Legacy Teaching Videos on Well-Being of Advanced Cancer Patients (S787)**

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**Objectives**
- Outline the psychological benefits of life story review through legacy teaching videos.
- Define ways future healthcare providers could find insights and learning from the lived experiences of cancer patients.

**Original Research Background.** The beneficial effects of life story review on the quality of life for adults with advanced illness is well described, including the creation of legacy videos for family gifting. It is unknown whether creating legacy videos with the intent of teaching future healthcare professionals about the “cancer patient” experience is beneficial or meaningful to patients.

**Research Objectives.** This study aims to describe the impact of creating legacy teaching videos on the well-being of patients with advanced cancer.

**Methods.** Adults were recruited from the outpatient and inpatient oncology and palliative medicine services of an academic medical center. Eligibility included a diagnosis of an advanced cancer, ECOG score of 0-3, English speaking, and without active psychosis. Patients underwent, in person, video recorded interviews that followed a semi-structured interview guide that addressed the lived experience of being a “cancer patient,” coping, and how the patient thought clinicians could provide better care to future patients. We measured the Functional Assessment of Cancer Therapy - General (FACT-G), Hospital Anxiety and Depression Scale (HADS), Patient Dignity Inventory (PDI), and Distress Thermometer.

**Results.** Of 18 patients already referred, 6 completed the interview and the follow-up visit. Patients reported that they “really enjoyed the experience,” and “it had helped them process” their cancer experience. A common theme was the patient’s strong desire to help others by sharing their story. Mean baseline scores are: FACT-G = 74.4 (SD 29.43); HADS-A 5.7 (SD 4.76); HADS-D 5.7 (SD 4.23); PDI 44.0 (SD 22.99); Distress Thermometer 2.2 (SD 2.64). Mean follow-up scores are: FACT-G = 77.4 (SD 23.53); HADS-A 4.8 (SD 3.92); HADS-D 5.0 (SD 4.10); PDI 41.8 (SD 18.78); Distress Thermometer 1.8 (SD 2.64).

**Conclusion.** Advanced cancer patients report that participation in an educationally-oriented legacy video project is enjoyable and potentially beneficial.

**Implications for Research, Policy or Practice.** Cancer patient legacy making and humanistic medical education can be linked for mutual benefit.

**Exploring the Emotional, Psychosocial and Physical Effects of a Community-Based Exercise Program for Cancer Survivors (S788)**

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**Objectives**
- Identify the physical and psychosocial benefits of exercise for cancer survivors.
- Understand survivor exercise guidelines and explore how to discuss these with cancer patients.
- Identify the key elements of cancer survivor exercise programs.

**Original Research Background.** As survival rates for many cancers continue to increase, there is a growing demand to meet the unique needs of cancer survivors when their cancer treatments result in a loss of physical ability, limitation in activities of daily living, and negative impact of social and emotional function.

**Research Objectives.** To assess the psychosocial and emotional effects of a community-based exercise program for cancer survivors as well as to ensure similar physical benefits when delivered by lay workers.

**Methods.** We qualitatively and quantitatively studied the impact of the LiveSTRONG at the YMCA exercise program over the course of 24 sessions using a series of functional assessments to measure participants’ aerobic fitness, strength, and flexibility and balance at the beginning and end of the program. Additionally, participants completed the Patient-Reported Outcomes Measurement Information System 29-item Health Profile (PROMIS-29), which measures health status for physical, mental, and social well-being.

**Results.** In 2014, 117 patients participated in the LiveSTRONG at the YMCA program in Central Florida, with an average age of 59.5 years (75% female, 87% breast cancer). Results of this cohort’s functional assessments showed an increase in aerobic function (22.7%), flexibility (13.3%), balance (39.7%), and strength (45%), which is similar to other studies. Additionally, results from PROMIS-29 reflected significant improvements in several psychosocial areas, including anxiety (60%), satisfaction with social role (56%), sleep (40%) and depression (28%).
**Conclusion.** These results suggest that a community-based cancer survivorship program can not only effectively engage survivors in safe physical activity, but can also build relationships and improve quality of life. Effective, affordable, and accessible programs provided by community-based organizations such as the YMCA are key to filling the clinic-to-community gap that exists for this vulnerable population.

**Implications for Research, Policy or Practice.** With the growing number of cancer survivors, it is imperative to re-examine payment models for treating cancer patients to include survivorship programs in community-based settings.

*The Emergency Department-Generated Plan-of-Care Consultation: Earlier Access to Palliative Care and Reduced Risk of Inpatient Death (S789)*

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**Objectives**

- Evaluate the effect that early plan-of-care consultations originating in the emergency department have on subsequent hospital mortality risk compared with referrals placed later in an admission.
- Evaluate the effect that early plan-of-care consultations originating in the emergency department have on subsequent hospital length of stay compared with referrals placed later in an admission.

**Original Research Background.** Compared with palliative care consultations placed later during hospital admissions, early referrals originating in the emergency department may influence risk of hospital mortality.

**Research Objectives.** We aimed to evaluate whether palliative care consultations placed to assist with a plan of care originating in the emergency department influenced risk of hospital mortality compared with referrals made later in the inpatient setting.

**Methods.** A retrospective analysis was performed using data collected between January 1, 2010 and December 31, 2014 by the palliative care team in a 533-bed teaching hospital. We logged the number of plan of care (POC) referrals initiated in the emergency department (ED) and in the inpatient setting. Inpatient mortality, hospital length of stay (HLOS), code status changes made by the palliative care team to DNR, and hospice disposition were recorded.

**Results.** 1379 and 104 plan-of-care consultations were placed by inpatient and ED referrers, respectively. Hospice disposition and code status adjustment rates did not differ significantly between the groups. The hospital death rate was significantly lower in the ED-referred group (18% vs. 30%, p<0.013). Average HLOS was reduced amongst patients who had plan-of-care consultations placed in the ED compared with those whose referrals were placed in the inpatient setting (6.3 days vs. 15.66 days, respectively, p<0.0001). Mean time from hospital presentation to POC consultation was 7.43 days in the inpatient population compared with 0.59 days amongst ED-referred patients (p<0.0001).

**Conclusion.** Plan-of-care consults originating in the ED resulted in a significantly reduced risk of in-hospital death compared with inpatient referrals. Average hospital length of stay in the ED population was reduced as well, which could suggest a mechanism for a reduction in the hospital mortality rate.

**Implications for Research, Policy or Practice.** Initiatives to generate earlier palliative care consultations may reduce hospital mortality risk amongst patients admitted with advanced illnesses.

*Systematic Advance Care Planning in the Nursing Home: Preliminary Outcomes from the OPTIMISTIC (Optimizing Patient Transfers, Impacting Medical Quality, and Improving Symptoms: Transforming Institutional Care) Demonstration Project (S790)*

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**Objectives**

- Discuss the relationship between advance care planning and the hospitalization of nursing facility residents.
- Describe successes and challenges to systematic advance care planning in the nursing facility setting.

**Original Research Background.** Advance care planning (ACP) has promise as an important strategy to reduce potentially avoidable hospitalizations of nursing facility patients by eliciting goals and preferences to guide treatment decisions.

**Research Objectives.** To assess the status of ACP implementation for long-stay nursing facility patients currently enrolled in a Centers for Medicare and Medicaid-funded demonstration project approximately halfway through the four-year project.

**Methods.** Participants (n=1516) are long-stay patients at 19 nursing homes. Nurse interventionists (n
= 18 RNs), who are certified Respecting Choices Last Steps POLST (Physician Orders for Life-Sustaining Treatment), are embedded full time in the nursing facilities and engage in ACP discussions as a core function.

Results. About half (44% or 665/1516) of the patients had engaged in ACP either with the RN or someone else. The most common reason for no ACP conversation was that the RN had not gotten to the resident yet (61% or 521/851). ACP discussions with RNs resulted in a change in orders 74% of the time. About a third (30% or 462/1516) of the patients had a POLST form, and most (77% or 356/462) were prepared by the project RN. A majority of POLST forms contained orders for Do Not Resuscitate (84%) and comfort measures/hospitalize for comfort only (54%).

Conclusion. Findings suggest that systematic ACP in the nursing home setting is feasible and often results in a change of orders to reflect resident/surrogate preferences. However, competing demands create challenges in the early stages of implementation. Structured systems are needed to ensure each resident is provided with the opportunity to engage in ACP conversations.

Implications for Research, Policy or Practice. Systematic, comprehensive ACP is achievable in the nursing home, but it requires a champion who has dedicated time to engage in conversations and has clear support to prioritize this activity.

Comparison of Symptoms in Patients with Lung Cancer and Hepatocellular Cancer Referred for Palliative Care at a VA Medical Center (S791)

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Objectives
- Compare symptom prevalence in lung cancer and liver cancer patients.
- Compare symptom interventions for clinical problems in lung cancer and liver cancer patients.

Original Research Background. Little is known about symptoms in hepatocellular cancer (liver cancer), although it is a leading cause of cancer deaths worldwide. We compared symptoms in hepatocellular cancer patient with a more well-known group: lung cancer patients.

Research Objectives. To determine if there is a difference in symptom profile and management between patients with liver cancer and lung cancer.

Methods. Clinical data were abstracted from charts of inpatients with hepatocellular carcinoma or lung cancer who were seen by the Palliative Care Consult Service from 2008 to 2012 (n=80) at the James J. Peters VA Medical Center (VAMC). Patients were matched by age and year of consultation. Symptoms were assessed at intake with the Condensed Memorial Symptom Assessment Scale. Frequency of symptom interventions for pain, ascites, pleural effusions, and encephalopathy were compared.

Results. There were 80 patients, 40 with lung cancer and 40 with liver cancer. Median KPS was 50% for both groups, and survival from palliative care consultation was 40 days for both groups. Symptom ratings were obtained from 33 patients with lung cancer and 34 patients with liver cancer. Both groups had 90% prevalence of symptoms. Weight loss (80% in lung vs. 41% in liver cancer patients, p < .004) and shortness of breath (67% in lung cancer patients vs. 26% in liver cancer patients, p < .001) were more prevalent in lung cancer patients. The median number of symptoms was five for both groups of patients, with a range of one to 10, and estimates for summary physical symptom distress and psychological distress scores were similar. Symptom interventions for ascites were more frequent for the liver cancer patients (57% vs. 16% for lung cancer patients, p < .001).

Conclusion. Patients with hepatocellular cancer have a different symptom profile when compared to lung cancer patients, and they require more interventions for ascites.

Implications for Research, Policy or Practice. These data will aid in developing palliative care services for patients with hepatocellular cancer.

Dosing of Analgesics for Patients with Liver Cancer or Lung Cancer (S792)

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Objectives
- Describe prescription of analgesics in patients with liver or lung cancer.
- Describe prescription of analgesics in patients with hepatic impairment.

Original Research Background. Analgesic administration in patients diagnosed with hepatocellular
cancer (liver cancer) can be difficult because of the paucity of evidence-based guideline recommendations for dosing opioids in patients with hepatic impairment. We hypothesized that dosage of acetaminophen and of opioids might differ for liver cancer patients compared to lung cancer patients seen at a VA medical center.

Research Objectives. To compare prescribing of acetaminophen and of morphine in patients with liver or lung cancer seen by a palliative care service at a VA medical center.

Methods. We reviewed the charts of 40 patients with lung cancer and 40 patients with liver cancer who were referred between 2008 and 2012 and were matched by age and year of referral. Charts were abstracted for symptoms, serum creatinine, total bilirubin, acetaminophen doses (prescribed and received), and oral morphine equivalents (prescribed and received) near and at the end of life.

Results. The prevalence (55%) and distress related to pain were similar in both groups of patients. Bilirubin levels were higher (3.0 mg in liver cancer vs. 0.92 mg, p<0.001) and albumin levels were lower (3.09 g/dl in liver cancer patients vs. 3.59 g/dl), and creatinine clearance was similar at 87 ml/min. Acetaminophen (APAP) prescriptions were written for three (7%) liver cancer patients and 14 (35%) lung cancer patients (p .0026). Opioid prescriptions were written for 18 (45%) liver patients and 25 (63%) lung cancer patients (NS). The maximum prescribed dose of APAP was 162 mg (1950-2600) for liver patients and 942 mg (975-3900) for lung patients (p .0026). Opioid prescriptions were written for 18 (45%) liver patients and 25 (63%) lung cancer patients (NS). The maximum prescribed dose of APAP was 162 mg (1950-2600) for liver patients and 942 mg (975-3900) for lung patients (p .004). Median daily doses of morphine were 45 mg/ for liver patients and 49 mg for lung patients. Only half of the lung cancer and liver cancer patients received the prescribed analgesics.

Conclusion. Differences were found in the prescription and dosage of acetaminophen and the receipt of analgesics.

Implications for Research, Policy or Practice. These findings should be confirmed in other populations.

Impact of Neuropathic Pain Treatments on Opioid Use and Pain Level in Gastrointestinal and Genitourinary Malignancy (S793)

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Objectives
- Describe the importance of neuropathic pain in gastrointestinal and genitourinary malignancies.
- Evaluate the impact of initiating neuropathic pain treatment on opioid need and pain levels in gastrointestinal and genitourinary malignancies.

Original Research Background. Neuropathic pain is common in gastrointestinal (GI) and genitourinary (GU) cancer, yet little is known about the efficacy of common neuropathic pain agents in this population.

Research Objectives. Describe the impact of neuropathic agents (gabapentin or pregabalin (G/P)) on pain and opioid use in hospitalized GI and GU cancer patients.

Methods. We reviewed charts of inpatients with GI and GU cancer at a southeastern academic health system from January to June 2015. We assessed demographics, G/P use, and dose. We calculated average 24-hour pain score (numeric, 0-10) and daily total oral morphine equivalents at zero, one, three, and five days from G/P start. We analyzed six tumor groups: anorectal, gynecologic (cervical, uterine, ovarian), pancreatobiliary, prostate, upper GI (gastric, small intestine), and urinary (bladder, urethra). Opioid use was categorized as unchanged (within 5% of pre-G/P level), increased, or decreased.

Results. Of 1286 hospitalizations, 216 (16.8%) received G/P, ranging from 12.2% for prostate to 41.1% for anorectal cancer. Of the 216, 59.2% were male, 50.9% were white, and 41.2% were African American. Mean age was 61.7 years (standard deviation (SD) 12.6). Mean (range, milligrams) doses at day one for gabapentin and pregabalin were 570 (0 to 2000 mg) and 129 (0 to 300 mg), respectively. 32.4%, 36.6%, and 46.3% of patients exhibited decreased opioid use at one, three, and five days after G/P start. Upper GI (75.0%), pancreatobiliary (58.5%), and urinary cancers (54.2%) had the strongest decreases at five days. 29.0%, 30.2%, and 40.4% experienced at least a 50% reduction in pain at one, three, and five days, respectively.

Conclusion. A plurality of patients exhibited lower opioid requirements five days after starting G/P for neuropathic pain. However, without a control group we cannot say G/P caused this reduction.

Implications for Research, Policy or Practice. Concurrent neuropathic agents with opioids may improve pain and reduce opioid requirements in some GI and GU cancer patients.

Retrospective Review of Patient Outcomes After Palliative Care Consultation Among Patients Undergoing Hypothermia Protocol (S794)

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Objectives
- Understand the role of the palliative care team in patients undergoing hypothermia protocol.
- Evaluate the impact that the palliative care team could have on the care of these patients.

**Research Objectives.** To describe clinical and healthcare utilization outcomes for patients who underwent hypothermia protocol following cardiac arrest and did or did not receive palliative care consultation.

**Methods.** We identified patients admitted to a critical care unit between 2006 and 2012 who had undergone hypothermia protocol in the setting of a cardiac arrest.

**Results.** Reviewed the charts of 62 patients who underwent hypothermia protocol following cardiac arrest, of which 35 (56%) received a palliative care consultation. Twenty-one patients (34%) survived, of which only eight (13%) had a good neurological outcome. Twenty-six (74%) of the patients seen by palliative care died (22 in the hospital, 13 after palliative extubation, four in hospice). Fifteen (56%) of those patients without a palliative consultation died in the hospital, three after palliative extubation; none died in hospice. The mean hospital length of stay was 16.71 days for patients seen by palliative care and 17.1 days for patients not seen (p = 0.90). Mean ICU length of stay for patients seen by palliative care was 11.34 days compared with 12.59 days for patients not seen (p = 0.55). Among patients who died in the hospital, the mean length of stay was 13.40 days for patients seen by palliative care compared with 8.87 days for those not seen (p = 0.06). Mean ICU length of stay among those that died in the hospital was 10.72 days for those seen by palliative care compared with 8.73 for those not seen (p = 0.35).

**Conclusion.** Palliative care consultation for patients with hypothermia protocol results in increased rates of deaths on hospice. Palliative care consultation may be associated with a lower mean ICU and hospital length of stay, however, the study was underpowered to detect a difference.

**Implications for Research, Policy or Practice.** This is an area of growing interest, and there would be great value in prospective studies of palliative care in these patients.

**Parental Perspectives of Communication at the End of Life at a Pediatric Oncology Institution (S795)**

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**Objectives**
- Identify important themes related to verbal and nonverbal communication at the end of life as described by bereaved parents in a focus group setting.
- Identify ways in which they may improve their own practice of communicating with patients and families at the end of life.

**Original Research Background.** The interaction of healthcare providers and hospital staff with patients and families at the end of life affects the parental grief experience. Both verbal and nonverbal communication are key components of this interaction.

**Research Objectives.** To explore the communication between hospital staff members and patients and families at the time of patients’ health decline near the end of life.

**Methods.** Twelve bereaved parents participated in a focus group. Semantic content analysis was used to analyze the transcript.

**Results.** Parents’ responses to the prompt about typical ways the medical team communicated yielded 109 codes, which were grouped into 12 themes. The most common theme was “patient inclusion” and “explanation of medical plan,” used in 17% of responses. Responses to the prompt about positive and negative aspects of communication generated 208 codes, yielding 15 different themes that were subdivided into positive (109 codes) or negative (94 codes) communication. The most common theme about positive communication was “the relationship between family and staff” (24.8% of responses, 72% of parents). The theme “negative variations in care” was most (24% of responses, 54% of parents) in describing negative communication.

**Conclusion.** This study helps identify techniques that should be used by clinicians as they work with children with cancer and their families, particularly including patients in treatment decisions, ongoing relationship building, communicating with caring and empathy, using an interdisciplinary team for additional support, and pairing bad news with a plan of action.

**Implications for Research, Policy or Practice.** These findings suggest that a two-step approach to these conversations may be most helpful to patients and families, similar to an approach that was recently outlined for Phase I informed consent discussions.

**Palliative Care Integration into Cardiac Transplant Recipient Care: A Retrospective Case Series (S796)**

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Objectives
- Review morbidity, mortality, and supportive care needs of cardiac transplant recipients.
- Introduce model of palliative care consultative service integrated into a cardiac transplantation program.
- Describe findings of retrospective case series of cardiac transplant recipients receiving palliative care consultation.

Original Research Background. Cardiac transplantation, a life-prolonging therapy available to select patients with advanced heart failure, is associated with significant morbidity, mortality, and supportive care needs. Despite calls for integration of palliative care (PC) services into transplant workup and care, such partnerships are extremely rare, and data remains limited about how such services benefit cardiac transplant patients and families. Since January 2015, the MedStar Washington Hospital Center Palliative Care Service has provided consultations to transplant patients from the MedStar Heart and Vascular Institute, whose program completes a median of 10 heart transplants per year.

Research Objectives. To describe indications for PC consultation and PC interventions in cardiac transplant recipients.

Methods. All cardiac transplant recipients who received PC consultation between January and July 2015 were reviewed retrospectively through the electronic health record. Reasons for consultation, pain and symptom assessment (on day 0, 2), estimated prognosis, PC interventions, and disposition were collected. Descriptive statistics were used to analyze data.

Results. Sixteen PC consults took place for 10 cardiac transplant recipients (time since transplantation median 10 months; median number hospitalizations 2.5 over study period). The primary reason for PC consultation was symptom management (pain 86%, non-pain symptoms 14%). Fifty-seven percent of the patients had moderate to severe (2-3/3) symptoms at presentation. Symptom scores decreased to none to mild (0-1/3) within 48 hours of initial consultation in 28% patients. Additional PC interventions included psychological counseling (19%), spiritual care (13%), disease state education (6%), and medical proxy determination (6%). Most hospitalized patients were discharged, but two required end-of-life care during hospitalizations.

Conclusion. In this series, cardiac transplant recipients experienced notable symptom burden, responded well to interventions to treat symptoms, and required additional PC interventions.

Implications for Research, Policy or Practice. Future research should further describe PC consultation’s role and benefit in cardiac transplantation.

Parents’ Relationship with Healthcare Providers During the Child’s Dying Process with Cancer at the Hospital (S797)
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Objectives
- Identify meanings bereaved parents assign to the relationship established with healthcare providers.
- Identify the elements that help parents and healthcare providers to establish a secure relationship during the child’s end of life.

Original Research Background. The relationship established between healthcare providers, parents and children during end-of-life caring is complex and multidimensional. There are still little evidence that explores how these relationships during the child’s last hospitalization influence parental adaptation after their child’s death.

Research Objective. This study aimed to understand the experience of parents in their relationships with nurses during their children with cancer’s dying process in the hospital.

Methods. The philosophical hermeneutic was used to conduct the study. Family members were interviewed at least six months after their child’s death from cancer in the hospital. For the recruitment, a search in a pediatric hospital’s obituary helped identify families. Each interview was audiotaped and transcribed. For the analysis, units of meaning and clusters were identified, then categories were inductively determined and submitted to an interpretation process.

Results. The most relevant aspects that emerged in parents’ experience regarding the relationship established with healthcare providers were:
communication, bond, care access, competence, values, and beliefs. The presence of these elements influences the way parents perceive their role while they live the unexpected experience of losing a child, and they remain in their memories associated with the meanings attributed for the illness and the loss.

**Conclusion.** These relationships serve as the basis to strengthen and support the parenting role, and they become a remarkable reminder that parents keep as a permanent connection to their deceased child. By revisiting these memories, meanings arise that contribute to their grieving process.

**Implications for Research, Policy or Practice.** The quality of parents’ bond formed with the healthcare providers is a concrete reminder of the child’s last days and the illness trajectory, influencing the quality of their grieving process. Policies in pediatric palliative care must emphasize directives to enhance the practice of allowing families to maintain the secure bond after their child’s death, helping to prevent complicated grief.

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**Intervention to Integrate Palliative Care into Transitional Care for Older Adults: Potential Challenges Identified by Clinicians (S798)**

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**Objectives**
- Describe palliative care needs among older adult patients with chronic conditions who are transitioning from hospital to home.
- Identify potential benefits and challenges to integrate palliative care into transitional care.

**Background.** Poorly managed symptoms and lack of advance care planning (ACP) for older adults with chronic conditions may lead to unwanted hospital readmissions and eventual death in the hospital. Integration of palliative care into post-hospitalization primary care is a promising strategy to improve care for this population.

**Objectives.** We conducted a two-phase, formative-evaluation study to assess the feasibility of registered nurses implementing primary palliative care into hospital-to-home transitional care. This paper reports findings from the first phase. Expert clinicians at the feasibility study site were interviewed to identify potential challenges and facilitators of such an intervention.

**Method.** The transitional palliative care (TPC) intervention proposal was developed by combining transitional care best practices with the palliative care principles of symptom management and ACP. TPC included a home visit and three months of telephone follow-up focusing on symptom management and ACP. The proposed intervention was evaluated by palliative care, transitional care, and geriatric care experts (n=26) in small group interviews. Data were analyzed using qualitative content analysis.

**Results.** All participants agreed it would be beneficial to integrate palliative care into the transition process. Potential challenges the participants identified included 1) patients with varied chronic conditions having diverse needs, 2) overlapping roles of involved healthcare providers, and 3) potential conflict with existing practices. Participants said patients’ needs vary by their bio-psycho-social profile, and diversity in their needs requires the intervention nurses to be resourceful and knowledgeable about management of multiple symptoms. Participants expressed concerns that the intervention might duplicate existing work of healthcare providers or hinder current practice.

**Conclusion and Implications.** To meet the diverse needs of patients and be feasible to implement, the modified TPC was incorporated into an existing transitional care service by health coaches, and intervention nurses’ training was augmented to include primary palliative care principles.

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**Understanding the Advance Care Planning Needs of Palliative Care Patients: Identifying Opportunities for Improvement (S799)**


**Objectives**
- Understand the advance care planning needs of inpatients referred to palliative care services.
- Describe the advance care planning activities currently completed by inpatient palliative teams.
- Consider opportunities to improve the advance care planning provided by inpatient palliative teams.

**Original Research Background.** Advanced care planning (ACP) is a critical function of PC teams, but it has not been well characterized.
Research Objectives. Describe the activities that PC teams undertake to meet the ACP needs of patients.

Methods. Twenty-four PC teams in the PC Quality Network (PCQN) entered data on 9515 patient encounters between July 1, 2014 and June 30, 2015. We examined patient characteristics associated with ACP and activities performed by PC teams.

Results. Overall, 72% of patients (6869/9515) screened positive for ACP needs, and PC teams provided ACP for 95.3% of these patients (6545). Patients referred for ACP were more likely to have cancer (32.2%, p=0.0001) than cardiovascular (13.1%), pulmonary (11.6%), or neurologic (10.7%) disease. Patients referred for ACP had an average of 1.2 family meetings with the PC team, compared to one meeting for other patients. Forty-two percent of patients (3962) were DNR/DNI at the time of PC consultation, which increased to 64% by hospital discharge (16.8% increase). Sixteen percent of patients (1583) had an advanced directive (AD) available at the time of PC consultation, and PC teams completed an AD for only 3% of patients (n=265). Eleven percent of patients (n=1,067) had a physician order for life-sustaining treatment (POLST) at the time of PC consultation, which increased to 46% by hospital discharge (15.5% increase). Sixty-six percent of patients (1,247) had a POLST order at the time of PC consultation, and PC teams completed a POLST for 15% of patients (n=1407). Among patients who were DNR/DNI or partial code upon hospital discharge, 25% left with a completed AD and 21% with a completed POLST.

Conclusion. Palliative care teams provide ACP for the majority of the patients they see. After PC consultation, significantly more patients choose DNR/DNI status. However, the minority of patients leave the hospital with a completed AD or POLST.

Implications for Research, Policy or Practice. Quality improvement efforts should focus on increasing the use of ADs and POLSTs to document patients’ preferences.

The End-of-Life Experience of Patients with Cystic Fibrosis and the Role of Pediatric Palliative Care Consultation (S800)

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Objectives
• Describe patterns of medical care provided to patients with cystic fibrosis (CF) around the end of life.
• Explore the roles a pediatric palliative care consultation service serves for patients with CF who ultimately die from their disease.

Original Research Background. While major advances have been made in the care of patients with cystic fibrosis (CF), it remains a life-limiting disease associated with significant morbidity. Little is known about the patterns of end-of-life (EOL) care for this population and the role pediatric palliative care consultation can serve.

Research Objectives. To characterize EOL care for patients with CF who received pediatric palliative care consultation since the inception of the Pediatric Advanced Care Team (PACT) at Boston Children’s Hospital (BCH).

Methods. We identified patients, age ≥5 years, who died of CF-related disease between 2009 and 2014. Patient, clinical, and PACT consultation characteristics were abstracted from the medical record.

Results. Fourteen patients with CF who died were identified, 57% female; mean age at death was 20.6 years (range 14.8 to 42.4 years). Most (86%) received a PACT consult. Median time between PACT consult and death was 152 days (range 34 days to 7.4 years). Content of PACT consultations most commonly included symptom management, goals of care, advance care planning, and psychosocial support. Among all who died, (93%) died in the ICU; 86% had a tracheostomy or were intubated, and 100% received non-invasive or mechanical ventilation leading up to death. Seven patients who died in the hospital (54%) had resuscitation status orders documented a median of 9.1 days prior to death (range 0.4 to 39.1 days).

Conclusion. The majority of patients with CF who died received formal pediatric palliative care consultation, often well before death. Most patients also received intensive life-sustaining interventions immediately prior to death.

Implications for Research, Policy or Practice. There appears to be a role for palliative care consultation to help foster communication at the EOL for patients with CF. Further exploring the role and timing of palliative care consultation for patients with CF may help healthcare providers identify areas of improvement in the assessment and implementation of their patients’ goals of care.